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ABSTRACT

Research reports, summaries, and investigations relative to establishment of a recreation-education facility at Valley Campus, Delhi, New York, are presented in this first volume of the 4-part series prepared in August of 1969. Items pertinent to the content and operation of a recreation-management curriculum are discussed. The purpose of the document is to provide a general basis upon which a particular curriculum might be established and to report the needs of, and possibilities for, a facility for a recreation training program. Internal and external relationships are considered for such a complex. To assist in developing the prototype, 4 types of factors (variables) are considered: (1) natural factors, (2) socioeconomic factors, (3) political and administrative factors, and (4) design and planning factors. Related documents are RC 004 157, RC 004 158, and RC 004 159. (AN)

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VOLUME ONE

A Four Volume Report

DELHI RECREATION-EDUCATION PROJECT REPORT

RESEARCH, SUMMARIES AND INVESTIGATIONS

RC004156

DELHI RECREATION-EDUCATION PROJECT REPORT

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Office of Planning Coordination

State of New York

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AUGUST 1969

CONTENTS

INTRODUCTION	1
TERMS OF REFERENCE	3
I. THE UTILIZATION OF AN OPERATING RECREATION-USE FACILITY AS A SITE FOR A RECREATION TRAINING PROGRAM	
Introduction	5
A Survey of Recreation Sources	5
A Survey of Educational Sources	8
A Survey of Literature Sources	11
Summary	14
II. NEED AND IMPACT	
Introduction	17
The Need in General: Man in Megalopolis	17
Outdoor Recreational Needs in the Appalachian Region	22
Need in Relevant Appalachian Subregions	27
Potential and Impact in Delaware County	27
The Needs and Impact of and on Delhi	29
The Recreational Impact of the Valley Campus Complex	31
The Education Impact of the Valley Campus Complex in General	33
III. MARKETABILITY OF SKILLS	
Introduction	36
General Factors for Consideration	37
Marketability in Public Agencies	38
Types of Job Opportunities-Public Agencies	38
Survey of Job Opportunities-Public Agencies	39
Marketability in Private Enterprise	41
Manpower Needs	42
NRPA Forum	43
Manpower Estimates Based on Inventories	45
Summary	48
IV. THE CURRICULUM CONTENT AND OPERATION	
Survey and Analysis	51
Summary	58

V.	INTERRELATIONS OF SIGNIFICANT FACTORS	
	Introduction	60
	Development Factors	61
	Natural Factors	62
	Socio-Economic Factors	62
	Political and Administrative Factors	62
	Design and Planning Factors	63
	Application of Development Factors	63
	Natural Factors - Ski Facility	63
	Socio-Economic Factors - Ski Facility	64
	Political and Administrative Factors -	
	Ski Facility	64
	Design and Planning Factors - Ski Facility	65
	APPENDIX	
	I. Individuals and Organizations Contacted to	
	Determine the Existence of an Operating	
	Recreation-Education Complex as a Training	
	Laboratory for Recreation Managers	67
	II. Outdoor Recreation Trends in Major Summertime	
	Activities	76
	REFERENCES	79

TABLES AND FIGURES

TABLES

1. The Results of a Survey Made to Determine the Existence of a Recreation-Education Complex Similar to that Proposed at Delhi, New York	6
2. The Results of a Survey of Educational Institutions, Individuals and Organizations Made to Determine the Existence of a Recreation-Education Complex Similar to that Proposed at Delhi, New York	9
3. Appalachian Region: Demand, Supply and Needs	25
4. Recreational Demand Analysis for 1-Hour Travel Time	35
5. Recreational Demand Analysis for 2-Hour Travel Time	35
6. Position Types Available to Graduates of a Two-Year Recreation Management Program	40
7. Average Salaries Available to Graduates of a Two-Year Recreation Management Program	40
8. Potential Employment Market Estimates	46

FIGURES

1. Location of Appalachian Region Relative to Urbanized Areas	19
2. Estimated Annual Recreation Days	26
3. 1 and 2 Hour Isochrons from Delhi	32
4. Estimated Full-Time and Part-Time Park and Recreation Personnel by Training Replacement Needs	44
5. Supply and Demand Analysis of Professional and Associate Professional Personnel Requiring Park and Recreation Training	47

INTRODUCTION

A recreation-educational facility in a community is a function of the educational system having close associations with the governmental, voluntary and economic systems. Development of such a facility is primarily the responsibility of one organization, but it cannot be developed in isolation and independent of other community and regional policies and programs. The present study is the result of a combination of factors which brought together the wide interests of the Office of Planning Coordination on the one hand, and the internal plans for expansion of the State University Agricultural and Technical College at Delhi on the other. Terms of reference which immediately follow this introduction, were developed which required the consultant to perform three major functions.

Generally, these can be described as:

1. Research
2. Development of a prototype theoretical model for a recreation-education complex.
3. Preparation of a master plan for a recreation-education complex at the Valley Campus, Delhi, New York.

The content and recommendations of this report are related to the local community including the Village and Town of Delhi and the County of Delaware. Most importantly, they complement the regional setting of the Appalachia Recreation and Cultural Resources Study.*

The facilities of the Valley Campus should be developed in such a way that local organizations and individuals participate fully in their development and use. Akin to the "park-school" concept, for example, where local school board and local recreation agency develop a joint use ball park, tot-lot or swimming pool available both to school and public alike, so the Valley Campus is seen as being a fully integrated community asset for the direct benefit of the local community as well as of the larger region, which comprises its market area.

With regard to the format of the Report, it has proved difficult to separate out the various parts according to the terms of reference since they are

*Prepared for Office of Planning Coordination, State of New York by State University, College of Forestry at Syracuse University, Syracuse, 1968-1969.

so closely related to each other. Nevertheless, for convenience the references have been retained as far as possible and the Report is presented in four volumes.

- Volume 1. Research, Summaries and Investigations
(Items 1a through 1e, 2d and part of 2c)
- Volume 2. Prototype Development
(Item 2a and part of 2c)
- Volume 3. Curriculum-Educational Program in Outdoor Recreation
Management
(Item 2b)
- Volume 4. Master Plan
(Items 3a and 3b)

TERMS OF REFERENCE

(Attachment I of the Contract Document)

The State University College of Forestry shall perform the following services:

1. Review and summarize selected studies, curricula and programs, and carry out appropriate investigations, giving direct attention to the Case Study of the Valley Campus Complex described more fully in Item 3 of this Attachment and giving general attention to existing and potential situations in other communities in the Appalachian Region, pertinent to:
 - a) The utilization of an operating recreation-use facility as a site for a recreation-training program;
 - b) The need for such a combined recreation-education facility in the Appalachian Region;
 - c) The content and operation of a suitable recreation-management curriculum;
 - d) The impact of a combined recreation-education facility in terms of economic and educational considerations;
 - e) The interrelationships of natural, political, administrative, design, planning and other significant factors in the establishment and operation of a combined recreation-education facility.
2. Analyze the basic information accumulated as a result of the investigations and summaries outlined in Item 1 of this Attachment and prepare the following:
 - a) A design for a prototype, (using the Valley Campus Area at Delhi as an illustrative site), of a recreation-education facility which could be developed in various communities throughout the Appalachian Region to provide diverse recreational, educational and economic services, and including sufficient drawings, maps, plans and explanatory narrative to show how natural, political, administrative, design, planning and other factors would influence the location and operation of such a facility;

- b) A recreation-management curriculum to be operated in conjunction with the recreation-education facility, together with guidelines and recommendations pertaining to the establishment of degree-granting and non-matriculated programs for training personnel in management of public and private recreation facilities;
 - c) An evaluation of the nature and scope of the educational and economic impact, including determination of estimated costs for the establishment and operation, of a recreation-education facility.
 - d) An assessment of the marketability of the skills which would be engendered by a recreation-education facility.
3. Prepare a case study to illustrate the practical applications of the services covered in Item 2 of this Attachment, such case study being more specifically described as follows:
- a) To utilize the academic, recreational and natural resources available at or in the vicinity of the State University Agricultural and Technical College at Delhi, and the area generally described as the Valley Campus Complex, including but not limited to land owned by the State University Agricultural and Technical College at Delhi, and/or the College Association at Delhi, Inc., as the subject of the case study;
 - b) To prepare drawings and site plans at scales suitable for showing recommended relationships of local key projects and land uses, one to the other, and incorporating recommendations relative to the maximization of significant natural, political, administrative, design, planning and other considerations, including the purchase of additional land and estimation of capital construction and operation costs;
 - c) To provide copies of a final report, consistent with conditions specified elsewhere in this Contract, which shall be suitable for presentation to possible sources of financial support, or accepted as sufficient justification for recommended programs;
 - d) To organize the format of the report, insofar as possible, in a manner that will facilitate the separation of its various components, thereby enabling the components to be used as units for specific study or financing purposes.

I. THE UTILIZATION OF AN OPERATING RECREATION-USE FACILITY AS A SITE FOR A RECREATION-TRAINING PROGRAM

Introduction

An operating recreation-use facility presents certain unique opportunities and advantages as a site for a recreation training program. Existing similar facilities provide a source of information from which to establish the benefits or problems connected with the operation of a combined recreation-education complex. Information which sheds light on the advantages and disadvantages of such a facility also provides insight into its actual site design and administration.

It is intrinsic to the term recreation-training that the major sources for determining the existence of such a facility would be those individuals and organizations that are active in the recreation and education fields. The consultant's personal knowledge and that of his colleagues, various recreation and education publications and numerous recreation and education directories were used to establish initial contacts. This section, therefore, discusses the results of the consultant's research to determine the existence of, together with benefits and problems pertaining to the utilization of a recreation-use facility as a site for a recreation training program.

A Survey of Recreation Sources

One group of inquiry letters was directed to those individuals and organizations dealing with the recreation aspects of the study. A list of the contacts made can be found in the appendix. These individuals and organizations were asked: "Do you know of any existing or planned combined recreation-training facilities?" and "Do you know of any other individuals or organizations that might be able to answer the same question?" Table 1 indicates the number of individuals and organizations that were contacted and the types of responses that were received from them.

Of the last two types of responses (five returns), three relate to the Unicoi Experiment Station in Helen, Georgia. Eleven of the returns expressed additional comments all of which being of a favorable nature.

Table 1. The Results of a Survey Made to Determine the Existence of a Recreation-Education Complex Similar to That Proposed at Delhi, New York

<u>Item</u>	<u>Totals</u>
Inquiries Sent	34
Replies Received	27
Types of Replies Received	
1. We do not know of any ... planned or existing facilities and we know of no other sources of information	7
2. We do not know of any ... planned or existing facilities, but we suggest other sources of information.....	15
3. A similar project or facility is believed to exist at a certain location	2
4. We are planning or operate a similar facility at this time	3
Selected Comments*	
There is a need for such a facility	1
The project has definite utility	4
The complex will require public ownership	1
We are interested in the results	4
Complex should be part of a regular school program.	2
Cannot comment on the feasibility of the project.	1
A unique idea	1
The project is feasible	3
Wish to exchange ideas with you	1

*A total of eleven made additional comments but, in several cases, there was more than one comment made per respondent.

All nine of the U.S.D.A. Forest Service regional offices responded to the inquiry. It is the general policy of the Forest Service to allow private concessionaires to operate recreational facilities on National Forest and National Grasslands only in very special situations. However, at last count there were four concessions operating within the entire National Forest - National Grasslands System. Two are located in the Southwestern Region and two in the Southern Region. None of these facilities is comparable to the proposal at Delhi and no training programs as such are offered.

The Forest Service expressed its awareness of the increasing demand and need for pre-trained responsible personnel at all levels in the outdoor recreation field. The organization could save time and money if they had access to pre-trained personnel in the recreation technician and recreation management areas. The 145 or more National Forests and National Grasslands in this

country add a significant number of potential job opportunities open to graduates of an academic recreation-management training program.

The National Park Service, U.S. Department of the Interior, has two major training areas; one at the Grand Canyon, Arizona and the other at Harper's Ferry, West Virginia. The courses offered at the training centers are usually those which cannot be obtained at any other location and pertain primarily to parks, recreation and interpretation. This is a situation where the employer is doing both basic and specific training because of a lack of pre-trained personnel.

A very unique training facility exists near the Grand Teton National Park area of Wyoming. This is the location of the National Outdoor Leadership School which trains persons, through a practical experience program, in the field of the conservation of the natural environment and outdoor recreational leadership for wilderness, mountaineering, and horsemanship expeditions. The director of the school, Mr. Paul Petzoldt, indicates that it is one, if not the only one, of a very few schools that offer this type of training. A short training course for owners and managers of private recreational facilities was held at the University of Washington, College of Forest Resources in 1968. However, no permanent training-laboratory facility exists at this location.

Mr. Samuel T. Dana, author of articles on recreation education, expressed the idea that the objective of the Delhi proposal is sound but he regretted the idea that more was not being done along these lines. Three other returns, like Mr. Dana's, stated the project concept had definite utility. Particular emphasis accorded its relationship to the present and predicted demand for outdoor recreation. Some of the others, including the U.S. Forest Service, thought that the development was needed and feasible but quite unique in concept and that a project such as this one should be administered by a public organization in conjunction with a regular school program.

Several references were made to the Unicoi Experiment Station for Outdoor Recreation located in Helen, Georgia. The experiment station is in the process of negotiating for the development of a program in tourism, recreation study and research. The station hopes to provide intern experience in the outdoor recreation field by 1970. Their program is oriented more towards ecological research than towards the recreation management-administrative area. It would be worthwhile for Delhi to keep in touch with these people in order that

they might learn from one another to improve upon their individual programs. The Unicoi Experiment Station, among others, requested a copy of the findings of the study thus underlining their interest in the development of such a facility.

A Survey of Educational Sources

The second group of letters was directed to those individuals and organizations that are mainly education oriented. The main source for these contacts was Barron's Guide to the Two Year Colleges. All the institutions written to were designated as offering a form of recreation-education as a course of study. Additional information listing institutions offering recreation courses was provided by the Bureau of Outdoor Recreation, the State University of New York Dean for two-year colleges, Butler Community College, Pennsylvania, and Chico State College, California. The Georgia Department of State Parks was also helpful in providing names of institutions. The initial inquiry to these institutions asked for a copy of their current college catalog from which the curriculum content and existence of a field laboratory facility could be determined.

Table 2 indicates the types and number of institutions and organizations that were contacted and the resultant determination of the existence of a recreation-management laboratory facility. A list of the institutions and organizations contacted may be found in the appendix to this section. None of the institutions responding offered a recreation-management curriculum similar to that proposed for the Delhi Agricultural and Technical College.

Several of the institutions contacted do own or have access to property that is used as a field facility, primarily for research, nature study, or to provide outdoor education and summer camp exercises. Existing facilities of this nature include:

Austin Cary Memorial Forest	(University of Florida)
Florida Conservation Reserve	(University of Florida)
Huntington Memorial Camp	(SUNY College at Cortland)
Lorado Taft Field Campus	(Northern Illinois University)
Sargent Camp	(Boston University)
Osgood Hill Conference Center	(Boston University)
Conservation and Environmental Service Center	(Glassboro College, New Jersey)

Table 2. The Results of a Survey of Educational Institutions, Individuals and Organizations Made to Determine the Existence of a Recreation-Education Complex Similar to That Proposed at Delhi, New York.

<u>Description</u>	<u>Number</u>
<u>4-Year Higher Educational Institutions</u>	
Contacted	31
Responded	21
Offer Recreation or Resource Recreation Courses	16
Offer Parks and Recreation Courses	3
Offer Park Administration Courses	2
Offer Field Laboratory Experience Similar to that Proposed at Delhi*	0
<u>2-Year Higher Educational Institutions</u>	
Contacted	49
Responded	29
Offer Recreation, Recreation Supervision or Recreation Leadership Courses	19
Offer Park Management Courses	4
Found not to be offering some type of course in Recreation or Park Management	6
<u>Other Individuals and Organizations</u>	
Contacted	2
Responded	2

*Several institutions own property that is used as a field laboratory, but it is used for multi-faceted research as opposed to a developed recreation facility complex site.

The University of Florida operates a state-wide agricultural education complex which is administered by the Institute of Food and Agricultural Sciences. The Institute, organized in 1964, includes all of the University's agricultural programs. On-campus teaching and research are carried out on 1,110 acres of farm land adjacent to the main campus. Other facilities include: a 1,170 acre dairy research unit; a 640 acre beef research unit; a 520 acre horticultural research unit beyond the Devil's Milhopper, and the 2,083 acre Austin Cary Memorial Forest near Waldo. In addition, there are some 21 other research units located from Pensacola to Homestead.

Two forests are available for field laboratories, demonstration and research work. One is the University of Florida Conservation Reserve, consisting of 2,500 acres of diversified forest lands which is located in Putnam County, Florida. The Austin Cary Memorial Demonstration Forest, consisting

of 2,083 acres of flatwoods forest land located northeast of Gainesville, is used as a field laboratory, demonstration and experimental forest where the student receives practical field experience. (12, p.239)

The State University of New York College at Cortland operates the Huntington Outdoor Education Center. This 400-acre facility is located at Raquette Lake in the Adirondack Mountains. The area is used in direct support in instructional and research activities in such fields as recreation education, physical education and the biological sciences. The site also serves as a conference center and for workshops in creative writing, music and art. (11, p.16)

The 140-acre Lorado Taft Field Campus is a branch campus of Northern Illinois University and is located near Oregon, Illinois. This branch campus, adjacent to the Lowden Memorial State Park, is situated in a hilly and heavily wooded area which was formerly the site of Eagle's Nest Art Association, an art colony. The buildings in the area are equipped for year-round use. The area is used for practical natural laboratory work where the students have an opportunity to study various aspects of outdoor educational activities not available in the traditional classrooms.

The Taft Campus is used during the regular school year for direct experience in outdoor education for all elementary education majors and other University classes. It is also made available to public school systems which wish to give their students and teachers an opportunity to use the out-of-doors in the educational program of children. Student teachers work with the elementary school groups on a 24-hour-a-day basis while they are living at the field campus. The physical plant for the Lorado Taft Field Campus generally consists of faculty offices, a clinic, conference rooms, a dining hall, classrooms and 106 lodging units. (10, p.197)

Boston University operates two conference and education-recreation centers. These are Sargent Camp and Osgood Hill Conference Center. Sargent Camp is located in Hancock and Peterborough in the Monadnock region of southern New Hampshire. It is used by elementary schools for conservation and science education classes, by University and alumni groups for family camping and skiing and by New England community groups for educational, religious, and recreational conferences. The camp also conducts a six-week summer program for boys and girls. Osgood Hill Conference Center is located in North Andover, Massachusetts. It is a 153-acre estate and is organized to accomodate meetings

and symposiums. There are several large conference rooms and smaller functional rooms; facilities for overnight guests and meals are also available. (1, p.21)

The Department of Recreation at Indiana State University offers a course in field and leadership experience in recreation which gives the student actual leadership experience by participation in an organized recreation program. Both public and private agencies are utilized in order to provide a variety of experiences. (7, p.272)

Glassboro State College and a number of school districts in southern New Jersey have organized the Conservation and Environmental Science Center temporarily located at Mt. Misery, New Jersey. A permanent multi-use environmental education complex is planned at Whitesbog, New Jersey. There are higher education as well as elementary programs offered. The program is working on the idea that environmental education anywhere seeks to create a concern for all environments that lead to a commitment to preserve or develop optimum environments and to improve less desirable environments. The Center is also concerning itself with the quality of the learning environment; they are interested in creating and utilizing situations and conditions where learning can flourish. (4)

The survey shows that a number of four-year and two-year higher education institutions offer courses in recreation, resource recreation, recreation supervision, recreation leadership, parks and recreation, park administration or park management, but none are comparable to the program proposed for the Delhi Agricultural and Technical College. The survey also shows that a few of the institutions offer field laboratory experience for their students but none of these are used for the dual purpose of providing outdoor recreation for tourists as well as providing a field laboratory experience for the students. Therefore, it is evident from this investigation that none of the individuals or institutions that responded have or know of a comparable program and recreation development site as that proposed by the State University of New York Agricultural and Technical College at Delhi, New York.

A Survey of Literature Sources

The returns from the surveys of individuals and organizations knowledgeable in the recreation and education fields showed that no combination educational program and utilization of recreation facilities for training purposes existed at those places which responded. Very little literature could be found that was pertinent to the utilization of an operating recreation-use

facility as a site for a recreation training program. A survey of recreation journals, education journals and other library references included: Education and Outdoor Recreation,⁽⁵⁾ The Education Index,⁽⁶⁾ The Readers Guide to Periodical Literature,⁽⁹⁾ issues of the American Vocational Journal,⁽²⁾ and issues of American Education Magazine.⁽³⁾ No reference was made in any of the preceding sources that gave any indication that a combined recreation-education facility such as that proposed at Delhi exists. There were several references made related to the utilization of laboratory type training programs. The laboratory training was always used in connection with teacher training programs or vocational education programs. The vocational education programs were mainly oriented to industrial arts or secretarial skills. In all cases the programs were directed towards the secondary school levels. There were no programs on a higher education level. There were no programs in recreation management or its related fields.

Another source of information was the Council of Hotel, Restaurant and Institutional Education located at Cornell University. The consultant was aware of the fact that at least one higher education institution operated a hotel as a student training laboratory at Paul Smith's College in Paul Smith's, New York. The determination of other facilities of this type and the problems and procedures connected with their operation will provide another basis upon which to judge the feasibility of developing a combined recreation-education laboratory complex.

According to the Directory of Hotel and Restaurant Schools⁽⁸⁾ thirteen higher education institutions located throughout the United States utilize some type of a training-laboratory operation in conjunction with an academic hotel management or restaurant management program. The following institutions offer such a program: Tuskegee Institute, City College of San Francisco, University of Denver, Michigan State University, Nevada Southern University, Erie County Technical Institute, New York City Community College, Paul Smith's College, Oklahoma State University, Pennsylvania State University, Washington State University, Cornell University, and State University Agricultural and Technical College at Delhi. All of these institutions were contacted and asked to comment on the advantages and disadvantages of the utilization of a laboratory training facility used in conjunction with the academic program. In the schools that do offer practical experience as a part of the program it was found that the graduates have a better position on job placement lists than those in the same area that did not have the opportunity of receiving

practical experience. Alumni surveys of such schools have shown that favorable mention is given with regard to in-school job training. An industrial advisory committee to the College of Business at Michigan State University feels that the requirement of practical experience best screens potential employees. It was also expressed that actual operating experience in any form is more helpful than none at all. It was generally felt that laboratory classes are essential in a program emphasizing skills. This gives the student an opportunity to evaluate his interest. Generally, students can achieve the same degree of experience or training in a university owned facility as they can in an industrial facility.

Washington State University has an outdoor recreation management program but does not offer field work experience as a part of the academic program. It does not require summer field work experience because it has no way of controlling the quality or direction of supervisory personnel under which the student would work. Its Department of Hotel Administration, however, does offer the students mixed training opportunities in a successful student union building operation. The student in the Washington State University Hotel Administration Curriculum normally begins employment during his freshman year in a lower scale job classification, and by his senior year has worked up to a position of supervisory management responsibility. The opportunity the student has connected with in-school training has a dual value in that he gets practical experience and he has the freedom of employment of his own wish or selection for the summer months.

The returns have also shown that this type of facility usually operates at a loss or breaks even, rather than making a profit. The main emphasis is placed on educating the student rather than making a profit. More intensive and individualized training is utilized thus increasing the amount spent on supervisory personnel. Also, the students sometimes feel that they are being exploited, thus decreasing their desire to produce to their full capacity. One problem of major significance concerns the difficulties that sometimes arise from a public institution competing with a private enterprise. This makes an effective public relations program of considerable importance. It is also noted that programs have proven to be more successful when the department directly responsible for the particular academic training is responsible for the entire operation of the laboratory facility as opposed to its operation by another department or administrative unit.

It is appropriate to mention here that the development of a combined recreation-education facility is going to present not only those physical and administrative problems connected with individual recreation and education facilities but it will also create unique problems that cannot be determined until the facility itself is actually constructed and in operation.

Summary

Summarizing, the consultant has found that because of the unique concept embodied in the Delhi proposal there is very little existing information available on which to base a decision on the feasibility of the utilization of a recreation-use facility as a site for a recreation-training program. It was necessary to obtain fragments of pertinent information from numerous individuals, institutions, organizations, agencies, and printed material. Because of the dual nature of the proposal, it was necessary to make contacts in both the recreation and education fields.

A survey of recreational sources showed that all individuals and organizations contacted believed that the concept of a combined recreation-education facility has merit, especially in anticipation of a future increase in recreation demand and needs. A facility is presently being planned, for example, in Georgia which will utilize recreation facilities as research sites to train personnel to manage similar facilities. No other similar facilities have been found to exist. A project of this nature should be administered by a public organization and in conjunction with a regular school program.

The survey of educational sources showed that there are numerous two-year and four-year institutions that offer courses in recreation, recreation leadership, resource recreation, and recreation supervision. Several institutions offer courses in park management or park administration. None of the institutions which responded offer a course in recreation-management similar to the one proposed for the SUNY Agricultural and Technical College at Delhi. None of the institutions which responded knew of or operated a recreation-use facility as a site for training recreation managers.

A review of printed material indicated that laboratory-type training programs are being successfully used in connection with industrial arts and secretarial skills programs. There are no laboratory training programs in recreation-management.

There are at least a dozen higher education institutions in the United States which utilize some type of training laboratory in conjunction with an

academic hotel or restaurant management program.

A number of statements can be made in favor of laboratory-type or field work experience offered to students as a part of their educational development. Some of those previously cited are listed below.

1. The students who have had field work or laboratory-type experience usually occupy better positions on industrial placement list than those students who have not had the practical training.
2. The practical experience requirement helps industrial representatives screen potential employees.
3. Any practical experience is better than none at all.
4. The student gets the opportunity to evaluate his interest more thoroughly and he has the opportunity to attain greater working skills than those students who can only get job experience during the summer months.
5. Generally, students can achieve the same degree of experience or training in a university-owned facility as they can in an industrial facility.

Some of the problems that the developers of a combined recreation-education complex should be cognizant of are as follows:

1. The facilities usually operate at a loss of capital or break even because of their emphasis on educating rather than on making a profit.
2. In view of the first statement, it will be necessary to have a continuous source of financial support in order to keep the combined facility operating properly.
3. A good public relations program is necessary to handle any problems which may arise from the public facility competing with private enterprise.
4. The programs should be operated and administered by the department that is responsible for the academic training phase of the program.
5. The development of a combined recreation-education facility is going to present problems encountered in facility management as well as those normally encountered in the education field along with problems unique to the concept of a combined recreation-education facility.

In view of the foregoing investigation, we conclude that there are successful educational programs that offer training-laboratory experience and facilities in conjunction with a regular academic curriculum. There are also numerous advantages to such a program as well as some limiting factors. Although no evidence could be found that substantiated the use of an operating recreation facility specifically as a site for recreation training purposes, there was sufficient information concerning similar facilities which could be applied to substantiate the feasibility of developing a combined recreation-education facility.

II. NEED AND IMPACT

Introduction

Since the considerations of need and impact are inextricably related, as two sides of the same coin, it was felt they should be combined into a single section. The Valley Campus Complex was proposed and is designed to meet established needs. Consequently, the impact of such a facility would obviously be towards the meeting of these established needs. Those areas where impact can be meaningfully isolated and discussed, have been investigated and reported herein. The more nebulous ramifications of the development of the Valley Campus Complex, where the question of impact is more a matter of conjecture, have also been discussed.

The Need in General: Man in Megalopolis

The Appalachian Mountain Range constituted a geomorphic barrier to the initial development of the eastern seaboard of the North American continent. This barrier created a localization of human activities that has constituted a major shaping force of what has resulted in what is now known as Megalopolis.⁽⁷⁾ This vast expanse of urbanization, Megalopolis, has been contained and formed as a consequence of the barrier that the Appalachians initially posed. While Megalopolis grew into a vast, densely populated, contiguous urbanized region, the Appalachians have been left comparatively undeveloped (see Fig. 1).

However, within approximately one day's drive, or 500 miles, of the Appalachian Region, there is almost 70% of the total population of the United States, around 125 million people (21). These people represent a multitude of human needs, some of which may be met by outdoor recreation. The setting of modern life in the Megalopolis gives the impetus for education in, and for, the outdoors. Outdoor Education by J.W. Smith et.al. (18) is based on the need of the injection and advancement of outdoor education values into our established social and cultural system. The social influences which accentuate the need for skills in outdoor education - which cannot easily be separated from recreation - are identified as those

"which have taken man away from the rural, earthy, natural environment:

1. Urbanization, with a steady drift into largely populated cities, has deprived many children and youths from contact with the land.
2. The tempo of modern living is frenzied and much of man's work is specialized and meaningless, depriving him of the opportunities for creative expression formerly associated with work.
3. Automation and mechanization, paradoxically, have increased the amount of time available for off-the-job living, while offering little opportunity for the development of knowledge, skills and attitudes necessary for the worthy use of leisure time.
4. Industry and automation imposed on the long biological pattern of the human being has certainly removed many of the opportunities of successful exercise, making it necessary to find additional ways of keeping fit.
5. The accumulative effect of the industrial age has created a world of abstractions, words and spectators - thus providing a need for real and first-hand experiences in the education process." (18, p.4)

Certain basic societal needs are only met by outdoor education. Smith identified these as:

1. A need for creative living through an understanding and awareness of the natural world around us.
2. A need for physical and mental fitness in order to combat restlessness, boredom and tension.
3. A need for roots in the soil, with a knowledge of the sources of food, shelter and clothing, i.e. an understanding of natural resources.
4. A need, whether conscious or otherwise, for spiritual satisfaction. (18, p.9)

He further observes that:

The outdoors can serve many of the present-day needs of people - physical, emotional, spiritual. Machines insure production; education must provide for the creative and wise use of expanded free time.... Outdoor education is needed to enrich and vitalize education and has much potential for general education. (18, p.12)

Smith and his colleagues write in the context of the public school system and stress the need for exposure to outdoor education for school children. This requires that teachers and leaders be experienced and qualified and that specialists be trained in the field of outdoor education and recreation. This is clearly a function above and beyond that of the temporary summer camp counselor or swimming pool attendant. It demands a university graduate comparable with and to work alongside, other specialists in what were formerly extra-curricular activities such as art, music, and physical education, but which are now generally well established in the school system.

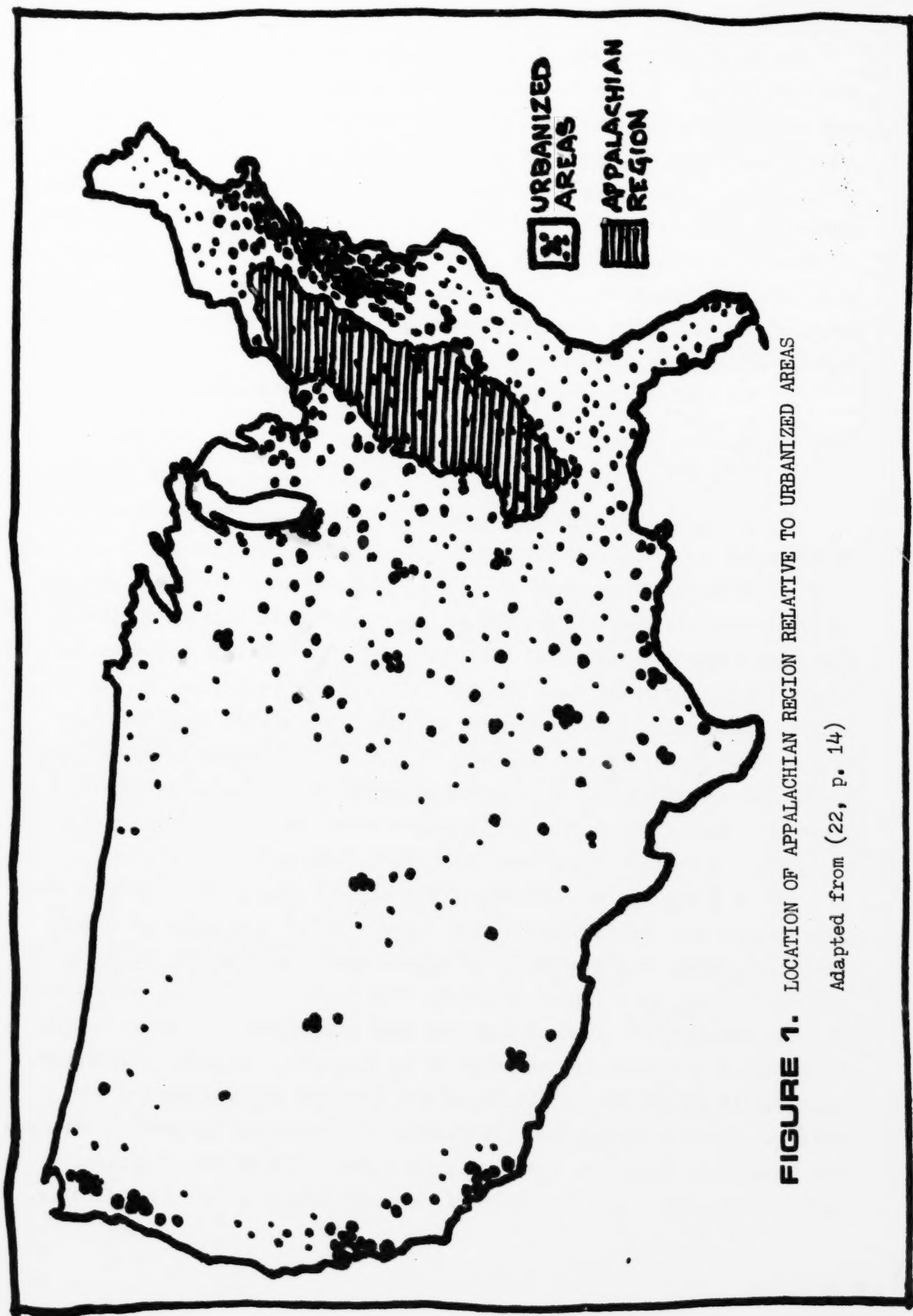


FIGURE 1. LOCATION OF APPALACHIAN REGION RELATIVE TO URBANIZED AREAS

Adapted from (22, p. 14)

The developing import of such needs are well attested to in the current literature. Joseph S. Ceisel⁽¹⁾ has cited the decreasing hours of work in a typical or average work week. Seymour and Wolfbein⁽¹⁷⁾ have reconsidered the changing role of working life as a factor in increasing leisure time. The increasingly available amounts of leisure time, greater mobility, combined with psychological pressures have created a great rise in outdoor recreation in recent years. Marion Clawson⁽⁵⁾ has compiled much data on attendance for public areas; federal and state park and forest areas have experienced increased attendance of about 10% annually for many years. Marion Clawson also notes that:

The past increases in attendance have been possible only because areas of parks have increased. The outlook is for material further increases in outdoor recreation over the next generation or longer, and these, too, will require a lot more land and water area for their satisfaction.^(4, p.17)

In, The Outdoor Recreation Phenomena,⁽¹³⁾ another Clawson statistic is presented - by the year 2000, 49 million acres more land for public outdoor recreation will be needed over what was available in 1950. The development is said to require additional investment of 88 billion dollars.^(13, p.6) This same report mentions the ORRRC projection of a 3-fold increase for demand for the 40 years from 1960 to 2000^(13, p.10) pointing out the possible assumptive errors inherent in such large scale, long term projections the report notes that they, "... will have little effect on the spread between the supply of recreation opportunities and the indicated demand for them. The demand for opportunities currently outruns the supply of facilities in most areas near population centers."^(13, p.11)

The need for the development of our natural resources to provide outdoor recreational facilities in turn creates a need for educated recreational managers. The importance of adaptability and training is noted by Hugh A. Johnson, in a report entitled, "The Role of Recreation Enterprises in Rural Areas."⁽¹³⁾ Johnson observes that many people trying to manage recreation enterprises are not adapted to the work. In such enterprises, where public relations are all-important personal characteristics are central. Johnson states that practically all potential recreation managers need management training, covering principles and practice of general business management and operation of recreation enterprises specifically.

In addition to business management, training in personnel management (human relations) and practical law are recommended by Johnson. The importance of recreation education is underscored by a concluding observation of Johnson's:

In particular situations, the operator's personality and his knowledge of the basic mechanics of good business management probably make the difference between satisfactory recreation and disappointment. (13, p. 15)

The National Recreation and Park Association study for the U.S. Department of Health, Education and Welfare⁽¹²⁾ attempted to define the current status of manpower supplied in the recreation and park field and to project the field's anticipated manpower demand through 1980. While the study considered all currently employed personnel - full-time and part-time - requiring short-term in-service or college training; primary emphasis was placed on the professional and associate professional leaders.

The results of the NRPA study predicts a gap between manpower supply and demand in the years ahead which cannot be overcome by current and anticipated training methods for increases in the number of higher education curricula. This study concluded:

If the park and recreation field is to supply quality service to all segments of the American population, it is essential that it establish minimum standards for personnel training and education. The degree of training required by each entrant to the field will vary according to the level of employment he aspires to; in general, however, the accent for the future must be on better personnel.

To meet anticipated demand:

1. New training programs need to be established.
2. New sources of faculty need to be found.
3. New methods need to be developed to intensify instruction.
4. New means need to be used to recruit students for careers.
5. New standards need to be set to match qualified personnel with appropriate positions which offer adequate salaries and fringe benefits. (12, p.16)

The NRPA study's argument is, in effect, a description of the need for recreation managers to develop and maintain recreation facilities to meet the booming demand. This argument has been augmented by additional studies, such as Yelle's⁽²⁴⁾ of county and municipal parks and recreation departments; and by the investigations discussed in Volume 1, Chapter 3 of this report. Both studies concentrated on the public recreation potential, whose bureaucratic machinery is often slow to react to indications of need. As R.E. Kerr,

General Park Superintendent of the State of New York's Conservation Department, advised in a reply to the questionnaire discussed in Volume 1, Chapter 3:

You should not overlook the private sector where probably in the coming years the vast majority of positions in the recreation field will be created.⁽⁸⁾

Unfortunately, the private sector potential is difficult to estimate, because of its dynamic nature. It is difficult to estimate who and how many members of private enterprise will endeavor to meet the outdoor recreational needs. However, it is possible to identify and discuss the needs themselves.

Outdoor Recreational Needs in the Appalachian Region

The U.S. Department of the Interior's, Bureau of Outdoor Recreation prepared A Report on Outdoor Recreation Demand, Supply, and Needs in Appalachia for the Appalachian Regional Commission. The report notes how the topographical barrier, the mountains of Appalachia, affected the westward migration, hindering the construction of lines of communication and transportation across and within the region. Later the decline of farming, the concomitant decline and/or mechanization of coal mining, together with the exploitation of natural resources left the region with unemployment and other evidences of economic distress.

The report considers tourism and recreation as a component of the solution to the region's economic problems. While possibly supporting some economic growth in itself, tourism and recreation contribute amenity factors necessary to attract and serve managerial and entrepreneurial talent in the region. This social-economic need is a function of population trends, income, increasing leisure time, and increasing mobility. Generally the Appalachian Region needs facilities to employ its existing population, to retain and attract a prime labor force, and to improve its per capita income. In 1959 the average per capita income in the Appalachian Region was 78 percent of the national average, ranging from a low of \$886 to a high of \$1,772. Data from 1959 indicated that 28 percent of the families living in the Appalachian Region had incomes of less than \$3,000 per year - a figure generally considered as the poverty level.^(23, p.15) Related to these needs of the residents of Appalachia are the recreational needs of the residents of the surrounding urbanized areas, whose increased leisure time and mobility often coupled

with higher salaries allows the satisfying of their needs to contribute to the situation of the needs of Appalachia.

These recreational needs were determined by the Bureau of Outdoor Recreation by subtracting the supply from the demand. The difference is presented in terms of annual activity-days, where an activity-day is defined as: "The participation by one person in one activity in 1 day. If a person participates in three different activities in 1 day, it is counted as 3 activity-days." (23, p. 6)

The outdoor recreational needs for the Appalachian Region in 1967 were estimated to be:

NEEDS	
(Annual Activity-Days) (23, p. 23)	
Boating	30,000,000
Swimming	117,000,000
Camping	8,000,000
Picnicking	37,000,000
Snow Skiing	200,000
Golfing	NA
Fishing	NA
Hunting	NA
Total	192,000,000

To meet those needs for the region in 1967, the report estimated 600,000 acres for water impoundments; 20,000 acres of land to be developed for camping; and 30,000 acres of land to be developed for picnicking. (22, p. 23)

The report projected that the needs by 1980, without any additional development, will have increased substantially, as is shown below:

NEEDS	
(Annual Activity-Days) (23, p. 26)	
Boating	74,000,000
Swimming	257,000,000
Camping	26,000,000
Picnicking	103,000,000
Snow Skiing	1,000,000
Golfing	NA
Fishing	NA
Hunting	NA
Total	468,000,000

To meet these needs the report estimates that 1.5 million acres of impounded water will be required for boating including almost 165,000 acres for fishing, and approximately 150,000 acres will have to be developed for camping and picnicking.

The estimated outdoor recreation needs in Appalachia for the present and the future are combined in Table 3 and graphically in Figure 2. The needs are expressed in terms of recreation-days, which are defined as "A standard unit of use consisting of a visit by one individual to an outdoor recreation development or area for recreation purposes during any reasonable portion of all of a 24-hour period." (22, p. 6)

The report concludes that by combined and concerted effort by all levels of government and private enterprise towards an upgrading of the quality of the environment, the people of the region can enjoy a richer life. The quest towards an upgrading of the quality of the environment would include provision of additional public and private recreation developments and complexes, scenic drives, trails and other related improvements. The richer life for the people of the region would be associated with the attraction of industry as well as recreation both creating jobs and other economic activity.

The report notes the difficulty in fairly or fully assessing all the tangible benefits, let alone the intangible effects, which they feel in many instances will be of even greater importance than the impact that is quantifiable and economically evaluative. It identifies the intangible benefits that might accrue from outdoor recreation as being reflected in such effects as improved health and welfare of the recreationists, better appreciation of our national heritage, and the enhancement of the quality of the environment. (23, p. 27)

Table 3. Appalachian Region: Demand, Supply and Needs

Present

Activity	Demand	Supply	Needs
	Annual Activity Days	Annual Activity Days	Annual Activity Days
Boating	53,499,000	36,523,000	29,617,000
Swimming	148,544,000	31,591,000	117,341,000
Camping	15,377,000	11,047,000	7,577,000
Picnicking	72,844,000	39,252,000	36,985,000
Snow Skiing	2,075,000	10,100,000	221,000
Golfing	NA	195,000 ¹	NA
Activity	Annual Fishermen Days	Acres of Water	Acres of Water
Fishing	57,420,000	1,345,000	142,000
Activity	Annual Hunter Days	Acres of Land	Annual Hunter Days
Hunting	28,126,000	108,333,000	NA

1980

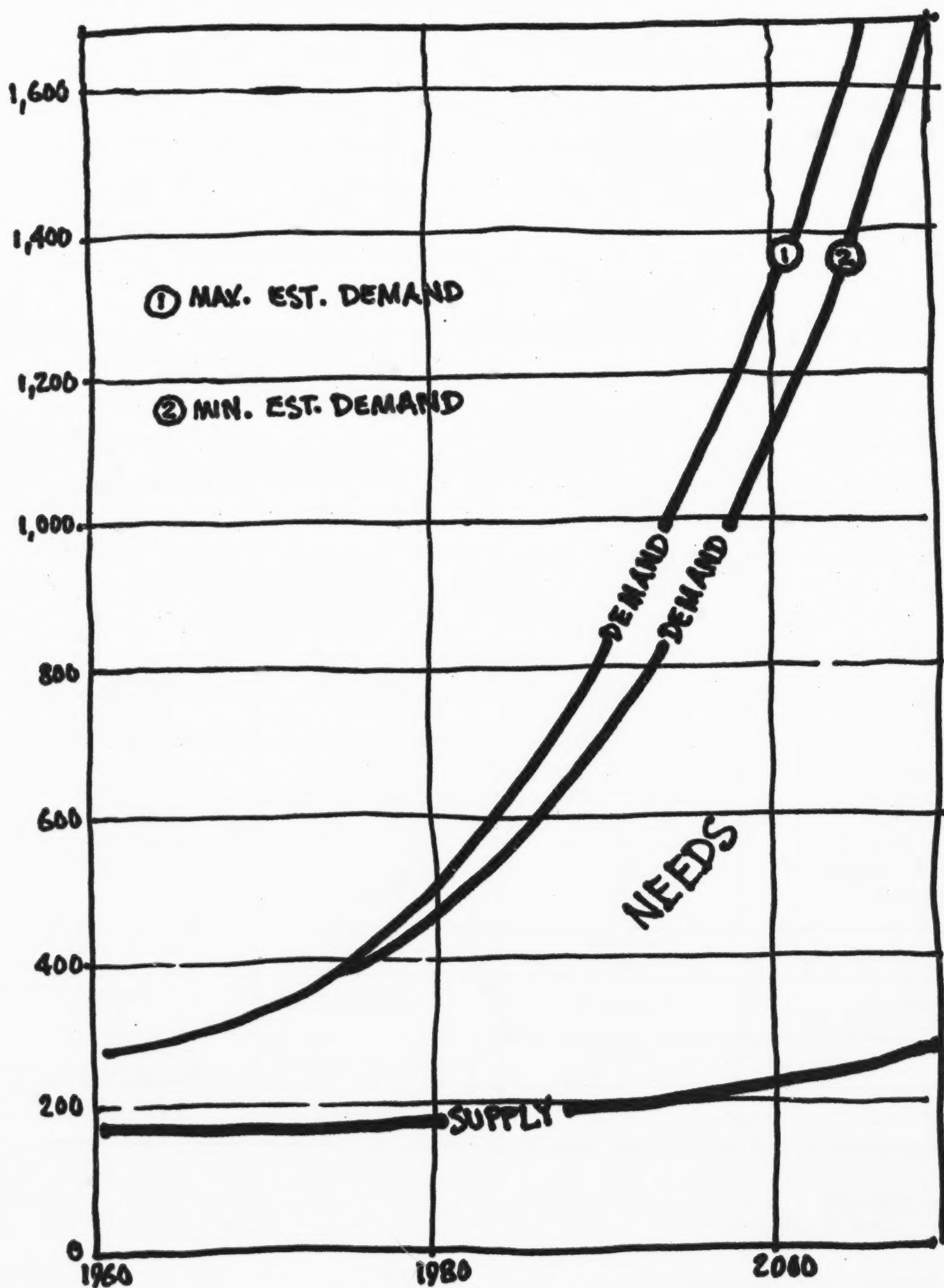
Activity	Demand	Supply	Needs
	Annual Activity Days	Annual Activity Days	Annual Activity Days
Boating	106,014,000	36,523,000 ²	73,780,000
Swimming	288,721,000	31,591,000 ²	257,130,000
Camping	30,792,000	11,047,000 ²	26,336,000
Picnicking	142,020,000	39,252,000 ²	102,877,000
Snow Skiing	3,775,000	10,100,000 ²	1,181,000
Golfing	NA	195,000 ^{1 2}	NA
Activity	Annual Fishermen Days	Acres of Water	Acres of Water
Fishing	73,662,000	1,639,000	144,000
Activity	Annual Hunter Days	Acres of Land	Annual Hunter Days
Hunting	35,427,000	106,577,000	7,300,000

1. Per Day
2. Present Supply

Source: (22, Appendix)

FIGURE 2. ESTIMATED ANNUAL RECREATION DAYS *

* Includes boating, swimming, camping, picnicking, snow skiing, fishing, and hunting.



Source: (22, p. 26)

Need in Relevant Appalachian Subregions

Background information of Delaware County in the Context of the Appalachian region is found in the report Outdoor Recreation Demand, Supply and Needs in Appalachia (23), also in the Appalachia Recreation and Cultural Study (19). In the former report swimming, picnicking and boating were shown as having greatest need suggesting the importance of providing additional water in the region. On the other hand camping and skiing were shown to have a supply in excess of demand. It must be emphasized however that this is a finding based only on recreation needs and given existing trends. However the provision of these latter facilities for the purposes of providing an on-site training laboratory for the Valley Campus at Delhi is a new and different criteria, and the earlier report findings must be judged in this light.

The ARCRS report presents an in depth analysis of outdoor recreational needs and potentials for N.Y.S. Appalachia. This report too gives a regional outlook on the questions of recreational needs and impact but also more detailed analysis by sub-regions and counties. Both reports however use data and analysis which can be useful as general guide lines but not for specific application to the location or purpose of Valley Campus itself. Nevertheless findings of the latter report lead to a recommendation for the establishment of the Valley Campus which both directly and indirectly will benefit the local and regional economy. It is suggested that reference be made to relevant sections of these reports and their recommendations as plans are prepared for specific phases of the Delhi Valley Campus.

Potential and Impact in Delaware County

At the county level there has been an investigation aimed directly at meeting the needs for outdoor recreation. It was undertaken by the Delaware County Soil and Water Conservation District. The report utilized ten key elements with several subdivisions to evaluate potentials for outdoor recreation in Delaware County. They were applied in various combinations to each kind of recreation development. The report made use of a multiplier - "a number that represents the weighted importance of a particular key element in relation

to other key elements."(6, p.6) A key element was defined as, "... any condition or situation that exerts a major influence on the potential for developing any important kind of recreation area or enterprise."(6, p. 6) The ten key elements are listed below:

- | | |
|-----------------------------|---|
| A. Climate | G. Fish and Wildlife |
| B. Scenery and Scenic Areas | 1. Habitat |
| C. Natural Areas | 2. Populations |
| D. Historic Areas | H. Populations of People |
| E. Soils | 1. Size and distribution |
| F. Water | 2. Age and occupation |
| 1. Existing water areas | 3. Income level |
| 2. Water impoundment sites | I. Proximity and Access |
| | J. Rural Ownership and Land Use Pattern |

The analysis resulted in three ratings of appraisal potential: high, medium and low for the twelve kinds of recreational developments considered. The results were as follows:

<u>Type of Recreation Development</u>	<u>Appraisal Potential</u>
Camping	
Vacation site	High
Pack trip	High
Transient	High
Fishing Waters	
Warm waters	Medium
Cold waters	High
Golf Courses	
Standard and par 3	Medium
Miniature and driving ranges	Medium
Hunting Areas	
Small game	Medium
Big game	High
Water fowl	Low
Natural, Scenic & Historic Areas	
Natural areas	Medium
Scenic areas	High
Historic areas	Medium
Picnic and Sports Areas	
Game, play, target areas	Medium
Bicycling	Medium
Picnicking	High
Riding Stables	Low
Shooting Preserves	Medium
Vacation Cabins, Cottages & Homesites	High
Vacation Farms	High
Water Sports Areas	Medium
Winter Sports Areas	High

The incorporation of Populations of People, as a key element relates this study to the human needs of outdoor recreation and education. These needs are then related to accessibility of basic recreation resources. However, the report does note that, "... no consideration was given to the economics involved in developing ... areas nor in their financial return."(6, p. 9)

While the mere existence of potential by itself does not demand its fulfillment, when related to need, an appreciation of impact may be gathered. For example, the previously identified need for picnicking in the region may be met by developing those areas in Delaware County, whose appraisal potential for picnicking is rated high.

The Needs and Impact of and on Delhi

Obviously, the specific needs and impact of a combined recreation-education facility will vary, from one particular location to another within the Appalachian Region. Therefore, for illustrative purposes, the Delhi situation is considered here.

The Comprehensive Plan for the Town and Village of Delhi,⁽¹⁶⁾ indicates indirectly that the location of a combined recreation-education complex at Delhi would have a significant economic impact. They note that:

As a supplementary farm activity, consonant with the natural beauty of the region, various recreation enterprises are also possible. These would include farm fish ponds, campsites, riding trails, hunting preserves, etc. Also possible, would be a major capital investment in a year-round resort facility. All summer and winter sport activities could be made available in Delhi. Such an installation might be oriented to educational and other institutional conventions, seminars, retreats, etc.

As was pointed out in the Population report, Delhi's future is tied in closely with the projected growth of the State University of New York at Delhi. As this already large employer expands still further, new job openings will be created, and there will be increased opportunities for local businesses to serve the needs of the college community by providing recreational and business services, home furnishings, building materials, food, shelter, and so on.^(16, p. 41)

The importance and need of the development as recreation as a supplementary activity is also evidenced in the report. It notes that the strength of

the Delhi economy is now derived from four sources:

1. The State University of New York at Delhi
2. Farming
3. Governmental operations
4. Retail trade. (16, p. 40)

It is pertinent that manufacturing is not listed. Delhi does not have an existing manufacturing base that could be expanded. The Comprehensive Plan points out that industrial recruitment is an expensive, time-consuming process and is not feasible unless a community competes with others in terms of labor, buildings and land, low taxes, utilities, transport, etc. The report states that this is clearly not the case with Delhi.

While noting that farming is a highly stable segment of the economy in the Town of Delhi, the Comprehensive Plan notes that the number of farms in Delaware County declined 16 per cent. Between 1950 and 1959 there was a decline of 14 per cent in the number of milk cows in Delaware County and a decline of 11 per cent for the Town of Delhi.

Thus, a need for a supplement of alternative to farming seems apparent. This reflects the finding of the Appalachia Recreation and Cultural Resources Study, which noted that the abandonment of agricultural land has been a characteristic of the Appalachian Region for a long period of time. (19, Phase 1, p. 60) The report cites, conversion to more extensive uses, such as forestry or recreation as alternatives to agriculture.

The need and importance of a basic economic resource was emphasized in Nathan's Recreation as an Industry. (11) The development of recreation would help augment the existing non-basic resources of Delhi and likely create a need for more.

For example, the development of a combined recreation-education complex is designed to promote the use development of the recreation resources. The region would not benefit solely through increased revenue obtained directly through developed facilities. The effect of the multiplier as discussed in depth by Nathan (9) would promote further economic activity. It is likely, in view of the Appraisals of Potentials for Outdoor Recreation Development (6) conclusions, that seasonal home development could be further encouraged. The Appalachia Recreation and Cultural Resources Study (19) noted that the vacation-home phenomena has been prominent in Delaware County where population density is relatively low and where resources are incompatible with such use. (19, Phase 1, p. 66)

The Comprehensive Plan notes that:

In an economic base, the rate of housing investment is important because it may generate local income, either directly or indirectly. According to the U.S. Bureau of Labor Statistics, each \$1,000 of single-family home construction generates a demand for 72 man-hours of employment on site; 35 man-hours in the manufacturing stage; and 12 man-hours in off-site construction activity. Each new home provides a market for more than 3,000 different goods and services.^(16, p. 37)

Therefore, the ramifications traced in just one direction from the initial educated development of recreation, can be clearly seen to stimulate the economic vitality of the region.

The Recreational Impact of the Valley Campus Complex

It has been possible to obtain an approximation of the actual demand, or specific impact, of just the recreational facilities proposed for the combined recreation-education complex at Delhi. An adaptation of a demand study method, developed by Dr. K.R. Swinford of the School of Forestry at the University of Florida, was employed on the proposed facility at Delhi.⁽²⁰⁾ The methodology was applied in two stages; the first considering the particular market potentials and everything the competing facilities within one hour's driving time of the proposed facility; the second stage considers these two factors within a 2-hour driving time.(see Fig. 3) The Appalachia Recreation and Cultural Resources Study⁽¹⁹⁾ utilizes a 2-hour isochron to investigate day-use potentials. The 2-hour travel time figure is held by many studies to constitute an outer limit for day-use activity. For example, in The Outdoor Recreation Phenomenon, it states, "As the travel time decreases to two hours..., the character of recreation demand shifts toward overnight use, with day-use still dominant."^(13, p. 12) However, within a 1-hour radius participation has been observed to be higher, therefore, this situation was treated separately with greater weighting.

The procedure utilizes various indices which are described below:

1. Use-Expectancy (UE) - An estimate of the decimal fraction of the population that will make a daily-use visit to some recreational facility within the 1 and 2-hour driving time of the town one or more times during the year.
2. Driving Rate (DR) - An estimate of the fraction of the total daily use that should come to the Valley Campus Complex's recreation facilities, accounting for competition from other facilities.
3. Estimated average number of visits per person during the year (NV) - based upon considerations of the nature of the town's population.

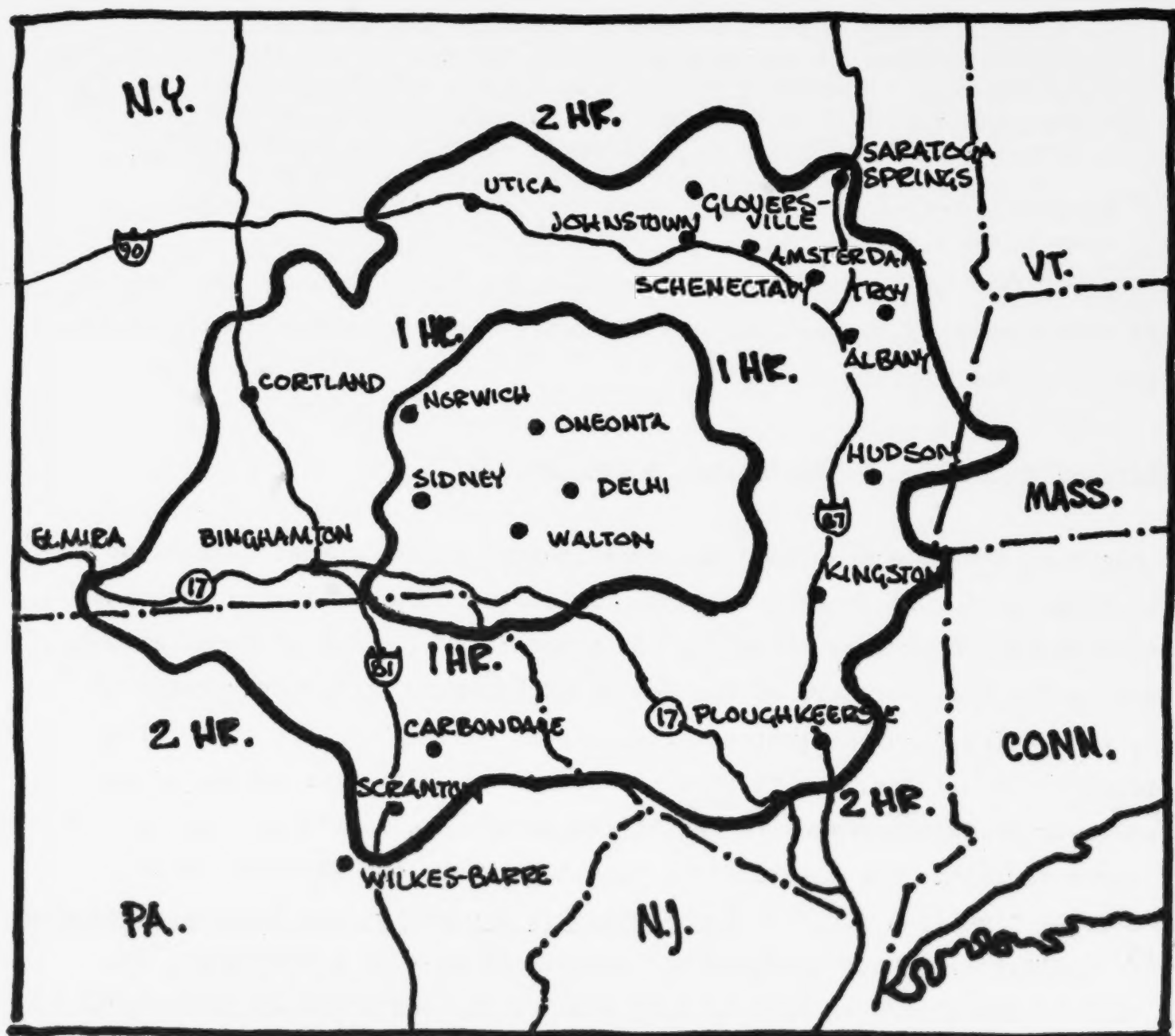


FIGURE 3. 1 AND 2 HOUR ISOCHRONS FROM DELHI

Base data from Rand McNally & Co., Northeastern United States, 1968.

4. Total Population of the towns (TP) - for the 1-hour travel time situation only, towns of 5000 and over were considered. For the 2-hour travel time situation all towns and cities with populations of 10,000 and over were considered. The population figures were obtained from adjusted 1960 census data.

Utilizing this data, it was possible to calculate the probable annual patronage from the specified population centers. This was computed as follows:
 $PP = (UE) (RR) (NV) (TP).$

The data and results are presented in Tables 4 and 5. Owing to the necessarily qualitative derivation of some of the factors due to the paucity of pertinent hard data, the final total of probable annual patronage is best presented as a range. Since the available data only considered users from population centers, the range is extended from the original figure calculated. Thus it appears that the Delhi recreation-education complex will attract between 17,000 and 25,000 persons per year from a 2-hour radius, this includes the current population from both the Town and outlying areas. So many variables enter into the recreationists decision-making process when larger trips are to be made, it was impractical to attempt to estimate the impact of the proposed facility beyond the 2-hour radius. For example, the ARCRS Report⁽¹⁹⁾ states that half of all recent vacation travelers chose the place they visited because it was the location of friends or relatives.

In addition, it was found in 1959-60 that 70 percent of the people who went on vacation trips to visit friends or relatives did in fact, engage in outdoor recreational activities; although the availability of these facilities was not a major determinant in the selection of the area he visited.⁽¹⁹⁾

Thus, it is extremely difficult to make an estimate of participation that includes such travelers. However, it may be noted that some impact of visits from beyond the 2-hour isochron may certainly be expected.

The Educational Impact of the Valley Campus Complex in General

Naturally, the impact of a combined recreation-education complex would be felt much beyond the immediate surroundings of its location. Generally, the impact would be to help meet the needs as described. Unfortunately, it is impossible to predict the future with any accuracy. All that may be done is to describe the existing and projected needs and strive to meet them. The impact of a single graduate is a variable that knows no bounds. That an educated

recreation-manager will contribute much to easing the social and economic problems of Appalachia, is being recognized at an ever increasing rate. The Marketability section of this report indicates the opportunity that exists for Appalachia to gain the wise development and efficient management of its resources that hold its salvation.

It has often been said that "Knowledge is Power." In the context of the dissemination of information encompassing the development and management of recreational resources, the adage is more than appropriate. Such knowledge is a key to a component of the solution that will enable the Appalachia Region to be all that it should, and can be. The impact can range far beyond the Appalachia Region, by eventually contributing in large part to the physical and mental health of a vast segment of this nation. The need is established, the impact awaits the implementation of the program.

Table 4. Recreational Demand Analysis for 1-Hour's Travel Time

Population Center	UE	SWCF ¹	DR	NV	TP	PP
Oneonta	.3	18	.28	2.5	1400	3600
Sidney	.25	16	.30	2.5	5200	1200
Norwich	.2	16	.30	2.5	9200	1400
Delhi-Walton	.5	20	.25	5	7000	4400
Subtotal						10,000
10% added to include rural residents						1,000
Estimated total visits by town residents to proposed Valley Campus Complex						11,000
Estimated Range						10,000-15,000

Table 5. Recreational Demand Analysis for 2-Hour's Travel Time

Population Center	UE	SWCF ¹	DR	NV	TP	PP
Newburgh	.1	21	.04	2	31000	250
Poughkeepsie	.1	19	.05	2	37500	400
Kingston	.1	16	.06	2.5	29500	450
Hudson	.1	14	.07	2.5	11500	225
Albany	.05	14	.07	1.5	127000	650
Troy	.05	14	.07	1.5	65500	350
Schenectady	.05	14	.07	1.5	79500	425
Saratoga Springs	.05	17	.06	1	17000	75
Amsterdam	.05	14	.07	1.5	29000	175
Johnstown	.05	14	.07	1.5	10500	550
Glennville	.05	14	.07	1.5	22000	125
Utica	.05	22	.04	1.5	99500	325
Cortland	.05	17	.06	1.5	19500	800
Binghamton	.05	14	.07	1.5	76000	350
Elmira	.01	19	.05	1	45000	50
Carbondale	.01	23	.04	1	14000	75
Scranton	.01	23	.04	1	106500	500
Wilkes Barre	.01	23	.04	1	59000	250
Subtotal						6275
10% added for rural residents						650
Estimated total visits by town residents to proposed Valley Campus Complex						6925
Estimated Range						7000-10,000

¹ Competing facilities were assigned weights on the basis of capacity and appeal. The drawing ratio of the proposed facility was computed for each town by dividing its assigned weight by the sum of the weights of all the facilities lying within the 1 or 2 hour travel time of the population center concerned.

III. MARKETABILITY OF SKILLS

Introduction

It is a well known fact that the Appalachian Region has been plagued by numerous socio-economic problems for many years. Two of these have been low median income and a high unemployment rate. As the environmental pollution in our rapidly expanding urbanized areas has built up layer upon layer, the poverty stricken masses of Appalachia have awaited a call for help. Until this time, the majority of their neighboring "megalopolites" had failed to recognize the presence of what is in truth a refreshing breath of fresh air in their own back yard. Both groups can benefit from this new realization. We know that almost 70% of the total population of the United States (125 million people) is within approximately one day's drive of Appalachia. We know that automation and mechanization have increased the amount of leisure time available to the great working populus. We also know that it is very likely that total population will double by the year 2000.^(19, p. 619) In turn it is probable to assume that the demand and needs of man to be in and recreate in the outdoors is also going to double. The Outdoor Recreation Phenomenon sites the ORRRC projection of a 3-fold increase in demand for recreation opportunities for 40 years from 1960 to 2000.⁽⁵⁾

The U.S. Department of Interior's Bureau of Outdoor Recreation, a report on Outdoor Recreation Demand, Supply, and Needs in Appalachia⁽¹⁷⁾ points out the great difference between existing supply and demand for participation in outdoor recreational activities. It follows that the need for the development of our natural resources to provide outdoor recreational facilities will create an increasing job market for educated recreational managers. As a result of extensive investigations as outlined in Chapter I, it was found that no facility presently exists that can supply capable personnel to successfully operate and manage the various major types of outdoor recreational facilities. This apparent lack of trained personnel has no doubt contributed to the large number of recreational enterprises presently operating within Appalachia on a "marginal basis".^(9, p. 23)

It is interesting to note that although the number of tourist establishments and total annual receipts for Delaware County fall below the State average, the County has the highest in each category among the fourteen

county New York State Appalachian Region.⁽¹⁴⁾ It appears that the influence of the College at Delhi has already aided in upgrading the quality and management of existing recreational facilities in the area. The establishment of a substantial program in recreation-management supported by a recreation field laboratory facility at the Valley Campus Complex will complete the second phase (supplying a product to meet the demand) of the demand-supply-marketing cycle. It is the intention of this chapter to discuss the third phase; marketing the product of a recreation management curriculum.

General Factors for Consideration

There are several major elements in marketing any product that should be taken into consideration for the success of the product and to serve its usefulness to the consumer. Assembly (training), packaging (publicity) and distribution (placement) can all be applied to the marketability of trained recreational managers as well as to consumer products.^(13, pp. 909-910)

The need for trained recreation-managers has been elaborated upon in Chapter II - Need and Impact, of this volume. There is a necessity to maintain a "running account" of the current and projected recreation trends in this country. The Bureau of Outdoor Recreation publication, Outdoor Recreation Trends,⁽¹⁸⁾ identifies the most popular summertime outdoor recreation activities along with the identification of those activities which will grow the fastest between now and the year 2000. A list of these activities and trends can be found in the Appendix. These trends in turn establish a market for personnel with expertise relative to the recreational activity or group of activities.

Another element pertinent to the successful marketing of a specific product is the packaging or advertising of that product. A constant channel of communication should be kept open between potential employers and college placement personnel to ensure that there is an awareness of what these graduates can do to meet the challenge of providing more efficient management of our natural as well as sociological environment. It is appropriate to keep close contact not only to meet the demand but also in order to initiate any necessary changes in background training to meet the changing trends of our time.

Let us assume that we have determined a need, and a method of training recreation managers. We have indicated the necessity of contact with potential employers but have yet to determine who the potential employers are and what number and types of positions are available. This corresponds to the distribution factor of the marketing process. The employment opportunities available to graduates exist in two categories: public agencies and private enterprise. Three methods were used to determine the employment opportunities available. One was to conduct a survey of potential employers, another was to survey and analyze existing documents on the subject, and the other was to analyze various inventory data of existing recreational facilities along with projected trends and to estimate the number of job opportunities that are and will be available.

Marketability in Public Agencies

Public agencies have continued to provide a substantial part of job opportunities for persons interested in pursuing careers in recreation. It is likely that this trend will continue. The types of positions that are and will become available in the future will demand more and more trained personnel.

If the park and recreation field is to supply quality service to all segments of the American population, it is essential that it establish minimum standards for personnel training and education. The degree of training required by each entrant to the field will vary according to the level of employment he aspires to; in general, however, the accent for the future must be on better personnel. (3, p. 16)

Types of Job Opportunities - Public Agencies

The types of positions that will be made available to graduates of a two-year Recreation Management Program will naturally command a higher level than those made available to those that have not had formal training. It is also likely that those that have a four-year training background in recreation management will have a greater flexibility in acquiring the type position they desire.

Graduates enrolled in the two-year Technical Curriculum will be trained for employment on an associate professional level in recreation management

and recreation program management. The curriculum places heavy emphasis on skill acquisitions and "tricks of the trade". This results in a job-oriented associate professional needing minimum additional training upon employment. Graduates of the Recreation Resource Management Program will qualify as:

1. Park managers and assistant managers
2. Recreation area managers and assistant managers
3. Naturalist aides
4. Maintenance foreman
5. Park technicians
6. Other similar positions

The Recreation Program Management "option" puts emphasis upon the management of outdoor recreation activities as parks and other outdoor recreation areas. Graduates of this program will qualify as:

1. Program specialists
2. Program aides
3. Recreation activity instructors
4. Nature interpretation specialists
5. Other similar positions

Persons graduating from a four-year recreation curriculum will have a background in theory, concepts, and factual information with professional-technical studies. Numerous employment possibilities will await graduates from these programs. Graduates may qualify as:

1. Administrative heads at various levels of park and recreation agencies
2. Educators in recreation management
3. Naturalists
4. Environmental resource specialist
5. Recreation resource research specialist
6. Other similar positions

Survey of Job Opportunities - Public Agencies

State and Federal - A sample survey of fourteen state and five federal agencies was made to acquire a sensitivity to the types of personnel needed by the agencies and in turn a sensitivity to the background training which should be included in a recreation management curriculum. As a consequence, it was found that some of the higher levels of government offer a limited market for two-year Recreation Management graduates. The survey indicated that the majority of job opportunities open to two-year graduates are available in the lower levels of the state and federal agencies and at the local agency level.

The positions which the agencies felt could be filled by graduates are shown in Table 6. Assistant park superintendent was the most often mentioned, with recreation area manager and assistant recreation area manager tying for second. Park superintendent and naturalist tied for third.

Table 6. Position Types Available to Graduates of a Two-Year Recreation Management Program

<u>Position</u>	<u>State and Federal Agency</u> ¹										
	Ga	Ky	Md	Md	NY	NY	Ohio	Pa	Tenn	Va	USFS
Park Superintendent	X			X		X		X		X	
Asst. Park Superintendent	X	X	X	X	X	X		X	X		
Park Crew Foreman			X			X		X			
Recreation Area Manager		X	X	X				X	X ²		X
Asst. Rec. Manager		X	X		X		X		X ²		X
Waterfront Director									X ²		X
Naturalist			X	X ²			X		X ²	X	
Campground Manager			X						X ²		
Ski Area Manager			X								
Patrolman-Ranger							X			X	

- 1 Multiple state listing indicates two agencies within the state responding.
 2 Part-time positions.

The salary range was quite varied, running from a low of \$4,368 for a patrolman to a high of \$13,301 for a park superintendent. The average salaries, per job position, are shown in Table 7.

Table 7. Average Salaries Available to Graduates of a Two-Year Recreation Management Program

Position	Average Salary ¹	
	from	to
Park Superintendent	\$ 7556 (8) ²	9895 (8)
Asst. Park Superintendent	6100 (8)	7734 (6)
Park Crew Foreman	5635 (3)	7009 (3)
Recreation Area Manager	6051 (5)	8581 (4)
Asst. Rec. Area Manager	5171 (4)	7626 (2)
Waterfront Director	5000 (1)	7000 (1)
Naturalist	5984 (3)	7553 (3)
Campground Manager	6254 (1)	8380 (1)
Ski Area Manager	6254 (1)	8380 (1)
Patrolman-Ranger	4644 (2)	5608 (2)

- 1 Does not include salaries for part-time positions.
 2 Number in parentheses indicates number of salaries averaged.

Local Agencies - A survey of county parks, municipal parks, and recreation departments in New York State was undertaken by Yelle of the Horticulture Department at Alfred Agricultural and Technical College. According to Yelle, the results of his study provided sufficient employment possibilities to persuade the department to proceed in the development of a park management curriculum. No figures were available at the time this report relative to the number of actual positions.

Marketability in Private Enterprise

As the demand for recreation rapidly increases, more and more of the responsibility to provide recreational facilities will be placed upon the shoulders of the private land owner. The Bureau of Outdoor Recreation report, Outdoor Recreation Trends, emphasizes this point.

Americans continue to turn to the outdoors for recreation, relaxation, and rewarding use of their leisure time as never before. Pressures on public and private outdoor recreation facilities are exceeding previous expectation by wide margins. By the year 2000 our participation in the major forms of summertime outdoor recreation activities will be four times greater than it was in 1960. We will need more recreation opportunities and service ... many more ... public and private, rural and urban. (17, pp. 4-6)

The ORRRC Study Report 21, The Future of Outdoor Recreation in Metropolitan Regions of the United States, points out the fact that in the past, the selection of recreation sites have followed no consistent pattern except that of inconsistency. This has resulted, in some cases, in the awkward location of recreation facilities with respect to place of residence of users and in turn, inefficiency of operation and service.⁽⁹⁾ Numerous cases such as this can be recalled in both the public and private sectors. It is important, therefore, to have persons trained in recreation management and knowledgeable in locational criteria in the private sector as well as in the public service sector.

The types of job opportunities in the private sector are as varied as the number of imaginative persons presently in the field. One might think that a majority of job opportunities lies in the realm of public employment but according to a National Recreation and Park Association report, Educating Tomorrow's Leaders in Parks Recreation and Conservation, the majority of

recreation-related job opportunities lies in the private enterprise sector. The study indicated that 949,541 full-time equivalent persons were working in the recreation and park field in 1967.^(3, p. 12)

The U.S.D.A. publication, Rural Recreation - A New Family-Farm Business⁽¹⁵⁾ discusses various kinds of recreation enterprises adapted to farms. Some of those discussed are:

1. Vacation farms
2. Picnicking and sports areas
3. Fishing waters
4. Camping, scenery, and nature recreation areas
5. Hunting areas
6. Hunting preserves
7. Selling recreation land or recreation use rights

All of these enterprises offer job opportunities to the graduate of a recreation-management program. ORRRC Study Report 11, Private Outdoor Recreation Facilities,⁽⁸⁾ discusses several others including:

1. Commercial beaches
2. Yacht clubs
3. Boat clubs
4. Ski areas
5. Shooting preserves
6. Resort hotels (which quite often offer a number of recreation facilities: golf course, riding stables, conference centers, etc.)
7. Privately operated cave
8. Sand dune sightseeing
9. Fishing camp and resort

Manpower Needs

It is quite apparent that there is and there will continue to be an extensive market for graduates of a recreation-management curriculum. This is continually evidenced by the increasing disproportionate ratio between supply and demand as noted in the Bureau of Outdoor Recreation's Report on Outdoor Recreation Demand, Supply, and Needs in Appalachia.⁽¹⁷⁾ Some documents and surveys provide us with more specific manpower needs while others have inventoried the various types of existing facilities from which we might estimate manpower needs.

NRPA National Forum

The National Recreation and Park Association recently completed a study which attempts to define the current status of manpower supply in the recreation and park field and to project the field's anticipated manpower demand through 1980.

Primarily emphasis was placed on professional and associate professional leaders; but all currently employed personnel - full-time and part-time - requiring short-term, in-service or college training come within the scope of the study.

The current supply of personnel was determined by mailing questionnaires to all known public park and recreation agencies, and relied upon knowledgeable national organizations for data on the private and commercial sectors of the field. The survey concluded:

1. 949,541 full-time equivalent persons were working in the recreation and park field in 1967.
2. The largest employment sector of the field is in commercial recreation (455,690 persons).
3. The private non-profit sector accounted for 190,000 employees.
4. The public sector comprised the remaining 303,841 persons (federal, 83,942; state, 53,583; and local, 116,316).
5. A total of 215,790 persons were in the professional and associate professional categories.
6. 187,345 professional and associate professionals were in the public sector; 26,449 were in the private non-profit sector; and 1,927 were in commercial recreation.
7. Based on the number of total professionals and associate professional personnel, 30.98 percent had required two years training and 69.02 percent had required four years training.
8. 22.94 percent of the 30.98 percent two-year personnel were required in the recreation program area (49,455 persons).
9. 1.74 percent of the 30.98 percent two-year personnel were required in the park resources area (3,759 persons).

In the final analysis of manpower trends between 1967 and 1980 it was found:

1. According to analysis of demand/supply ratios, an ever-increasing deficit may be expected in the years ahead for professional personnel.
2. The supply of professional and associate professional personnel is expected to taper off slightly from approximately 215,000 in 1967 to about 195,000 in 1974.
3. During the same period, the demand at each of the three projection levels shows a steady and rapid increase.

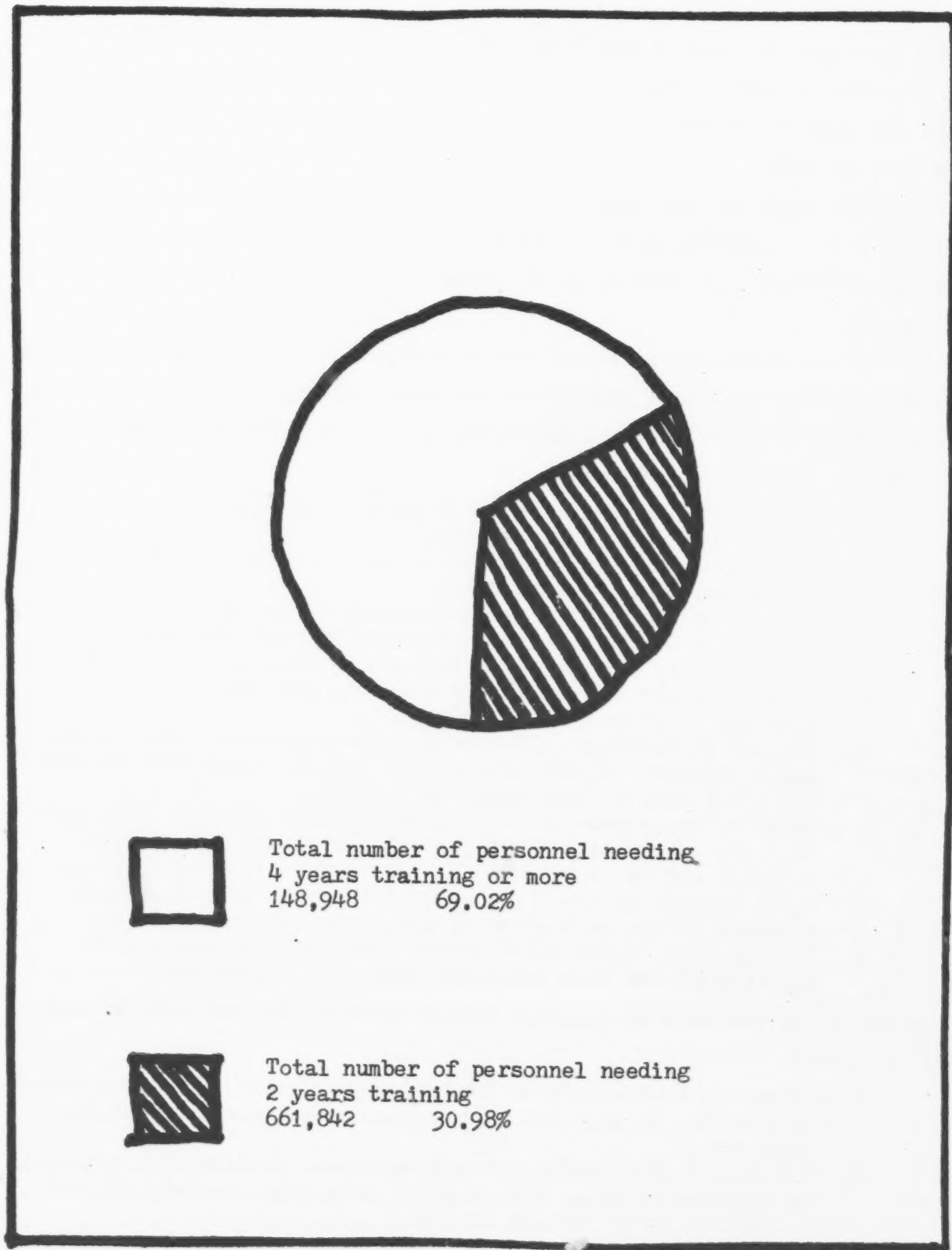


FIGURE 4. ESTIMATED FULL-TIME AND PART-TIME PARK AND RECREATION PERSONNEL BY TRAINING REPLACEMENT NEEDS

Source: (2, p. 12)

4. After 1974, a substantial increase in the supply of personnel will occur, reaching a high of more than 220,000 by 1980. However, demand projections indicate an even greater increase in need for trained manpower - thus widening the supply/demand gap even farther.
5. The gulf expected between manpower supply and demand in the years ahead cannot be overcome by current and anticipated training methods or increases in the number of higher education curricula. The need is not only for more graduates but also for more qualified faculty. (2, p. 13)

Figure 5 shows the disproportionate ratio between the projected supply and projected demand for professionals and associate professionals requiring park and recreation training.

Manpower Estimates Based on Inventories

In estimating the manpower demands for various areas of job opportunities we have made the following assumptions:

1. The inventories used are a reasonable approximation of the actual number of existing facilities within the area designated.
2. We have used a conservative figure of only two job opportunities per new facility.
3. Average annual growth rate of public agencies is 11.0 per cent based on expenditures. (2)
4. Average annual growth rate for the private recreation sector is 2.54 per cent based on expenditures. (2)
5. Probable manpower losses in each sector include: personnel retiring, practitioners accepting employment in other areas, women marrying, etc., creating an annual attrition rate of 3.0 per cent. (2)

Methodology - The annual potential job opportunities are then calculated in the following manner:

1. Acquire inventory data for specific type activity or position.
2. Determine in which category the specific type of activity or position falls (public or private).
3. Determine number of jobs available for inventory year by multiplying the inventory number by the appropriate percentage (11.0 per cent for public or 2.54 per cent for private).
4. You now have number of annual average job opportunities for that activity, for given year before accounting for annual attrition rate of 3.00 per cent.
5. Determine number of job openings made available annually by multiplying inventory number by 3.00 per cent attrition rate.
6. Determine annual total potential number of job opportunities for given year by adding number of annual average job opportunities (step 4) to annual number of job opportunities made available through attrition (step 5).
7. Multiply employment factor determined in step 6 by two to obtain the annual employment market for that particular area of opportunity.

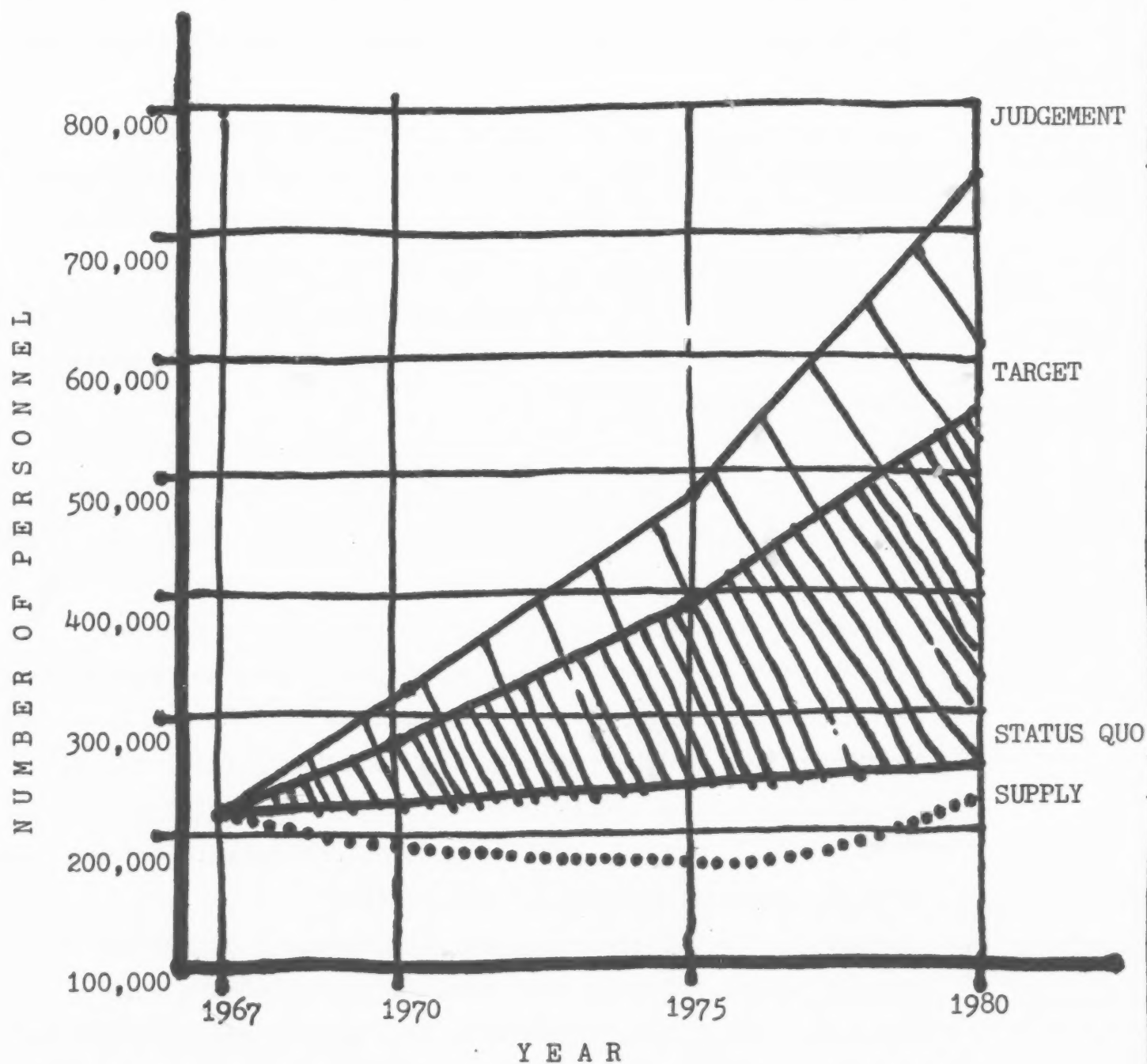
Table 8. Potential Employment Market Estimates

Area of Opportunity	Location	NEF	OC	ExF %	EF	Annual EM	1972 EM
golf courses ⁽⁶⁾	NYS	250	private	6.54	16	33	96
campgrounds ⁽¹¹⁾	NE, US	1428	private	6.54	93	187	560
campgrounds ⁽¹⁾	NE, US	377	public	14.00	53	106	317
recreation areas-general ⁽¹⁶⁾	NE, US	2027	public	14.00	284	598	1,703
recreation areas-general ⁽⁷⁾	US	14000	public	14.00	1,960	39	1,760
shooting preserves ⁽⁴⁾	Appalachia	134	private	6.54	9	16	53
shooting preserves ⁽⁴⁾	US	329	private	6.54	22	43	129
ski areas ⁽¹²⁾	NE, US	151	private	6.54	10	20	59

Note: NEF - Number of Existing Facilities
 OC - Ownership Category
 ExF% - Expansion Factor Percentage
 EF - Employment Factor (rounded)
 EM - Employment Market (rounded)

The above examples are considered to be the minimum number of potential opportunities available each year for the specific activity in the location indicated. When projected for several years, as shown in the 1972 projection, the numbers of potential opportunities create a substantial market.

Table 8 by no means is meant to be a comprehensive listing of job opportunities for graduates of a recreation-management curriculum. The listing is presented to show a sample of the number of job opportunities available. Rand McNally's Guidebook to Campgrounds⁽¹⁾ lists more than 12,000 campgrounds in the United States and Canada. It can be clearly seen that the expansion factors of 6.54 per cent and 14 per cent are far from meeting the actual 35 per cent increase in demand for camping as indicated in the Bureau of Outdoor Recreation's report on Outdoor Recreation Trends.⁽¹⁸⁾



NOTE: If one assumes that the existing distribution of personnel needing 2 years of college training (30.98%) and personnel needing 4 years or more of college training (69.02%) will prevail in the future, it is possible to estimate the relative numbers of personnel by the level of training.

FIGURE 5. SUPPLY AND DEMAND ANALYSIS OF PROFESSIONAL AND ASSOCIATE PROFESSIONAL PERSONNEL REQUIRING PARK AND RECREATION TRAINING

Source: (2, p. 16)

Summary

A survey and analysis of pertinent literature, etc. shows that there is a substantial job market for those persons graduating from two-year and four-year recreation-management programs. A summary of the investigations is presented as follows:

1. The marketability of the skills engendered by a recreation-management curriculum can be compared to the marketing process for a regular consumer product: assembly (training), packaging (publicity), and distribution (placement).
2. The need for trained recreation managers is clearly made evident in various documents published by interested organizations and agencies.
3. There is a necessity, as in consumer product marketing, to maintain a "running account" of the current and projected trends relative to a product; in this case, it is in the field of outdoor recreation.
4. A constant channel of communication should be kept open between potential employers and college placement personnel to; create an awareness of the graduates' skills and to adjust curricula to meet the needs of the changing market trends.
5. The employment opportunities available to graduates exist in two major categories: public agencies and private enterprise, with the current majority in the latter.
6. Graduates of a two-year recreation management curriculum can command higher salaries than those persons lacking formal training. Similarly, those with four years training will be able to command higher salaries than those with less training.
7. The more formal training one has in the field of recreation management, the more flexibility he will have in choosing a position that best meets his personal goals.
8. Graduates of a two-year Recreation Program Management curriculum could expect to be offered positions as: program specialists, program aides, recreation activity instructors, nature interpretation specialists, etc.

9. Graduates of the two-year Technical Curriculum could expect to be offered positions as: park managers, assistant park managers, recreation area managers, naturalist aides, park technicians, etc.
10. Numerous employment possibilities are open to graduates of a four-year recreation management program. Graduates would qualify as: administrative heads of park and recreation agencies, educators in recreation management, naturalist, environmental resource specialists, etc.
11. Survey to determine the marketability of two-year recreation management graduates in public agencies showed:
 - a. The majority of job opportunities are available in the lower levels of federal, state, and local agencies.
 - b. A marketability survey of New York State county parks, municipal parks, and recreation departments provided sufficient employment possibilities to persuade Alfred Agricultural and Technical College to develop a park management curriculum.
 - c. Assistant park superintendents were in the most demand, with recreation area managers and assistant recreation area managers tying for second. Park superintendents and naturalists tied for third.
 - d. The salary range was quite varied, running from \$4,368 for a patrolman to \$13,301 for a park superintendent.
12. As the demand for recreation rapidly increases, more and more of the responsibility to provide recreational facilities will be placed upon the private land owner.
13. In order to avoid additional inefficient outdoor recreation operations, personnel knowledgeable in public relations, locational considerations and other relevant criteria must be employed in both private and public agencies.
14. There are numerous job opportunities in the private sector. Some of the enterprises which a recreation-management graduate might be affiliated with might include: vacation farms, picnicking and sport areas, fishing waters, camping, hunting preserves, shooting preserves, ski areas, commercial beaches, resort hotels and associated facilities (golf course, riding stables, etc.)

15. The increasing disproportionate ratio between recreation supply and demand indicates that there is and will continue to be an extensive market for graduates of a recreation-management curriculum.
16. A recent NRPA study to define the current and projected 1980 manpower supply and needs concluded that:
 - a. There were 949,541 full-time equivalent persons working in the recreation and park field at that time.
 - b. In 1967 a total of 215,790 persons employed in the recreation and park field were in the professional and associate professional categories.
 - c. 187,345 professional and associate professionals were in the public sector; 26,449 were in the private non-profit sector; and 1,927 were in commercial recreation.
 - d. Based on the number of total professional and associate professional personnel, 30.98 per cent had required two years training and 69.02 per cent required four years training.
 - e. 22.94 per cent of the 30.98 per cent two-year personnel were required in the recreational program area (49,455 persons).
 - f. 1.74 per cent of the 30.98 per cent two-year personnel were required in the park/resource area (3,759 persons).
 - g. According to an analysis of manpower demand/supply ratios, an ever-increasing supply deficit may be expected in the years ahead for professional personnel.
 - h. The gulf expected between manpower supply and demand in the years ahead cannot be overcome by current and anticipated training methods or increases in the number of higher education curricula. The need is not only for more graduates but also for more qualified faculty.
17. Sample annual employment markets can be estimated by applying specific factors to existing recreation facility and employment inventories.
18. It is projected that there will be 11,760 new employment opportunities available between 1969 and 1972 in the park and recreation management field throughout the United States.

IV. THE CURRICULUM CONTENT AND OPERATION

Survey and Analysis

Authorities have been well aware since the turn of the century that certain areas in this country were so outstanding in their natural character that these areas should be set aside for future generations to enjoy lest they be destroyed by the sometimes blind "progress" of a growing nation. As a result, we have an extensive National Park system, National Forest system and numerous State Park systems throughout the country. Of late, we as a nation, have realized that more green spaces and even more developed recreational facilities are needed to cope with the disproportionate ratio between existing supply and demand for outdoor recreational facilities. As a result of this growing outdoor recreational crisis, the Federal government has undertaken numerous studies to identify the specific problems so that it might take any necessary action.

One study, A Report On Outdoor Recreation Demand, Supply and Needs in Appalachia,⁽¹⁾ deals specifically with the status of outdoor recreational facilities in the Appalachian Region which is being called upon to meet the needs of the rapidly expanding eastern "Megalopolis".

Accompanying the crisis in provision of recreational facilities is the need for trained personnel to operate and maintain them. There is also a need to educate ourselves generally, and future generations, to deal comprehensively with both human resources and natural resources and their relation to each other - in other words, the "total environment".

Dean Samuel T. Dana in his report, Education and Outdoor Recreation, for the Bureau of Outdoor Recreation, points out the need for education at all age levels.

Ability to obtain optimum benefit from outdoor recreation in its myriad forms is not innate. It must be acquired by training and experience. Both of these are desirable for most of us throughout our lives, but it is especially important that they should be offered to children from their earliest years as a means of helping them to understand, to enjoy, to respect, and to protect the world in which they live, both now and later.^(2, p.3)

Dana also points out that the higher education institutions have a clear-cut responsibility for providing education relating to the natural environment, including its use for outdoor recreation, for the bulk of their student body and for as many adults as practicable.

Another responsibility of colleges and universities in the field of recreation is to train persons who will serve as leaders of those engaged in recreational activities as planners, interpreters, managers, and administrators of the resources used for recreational purposes. (2, p. 13)

Dana further recommends that the philosophy and procedures for handling the subject of outdoor recreation in the grade schools apply equally well to colleges but at a higher level. In essence, he proposes to treat outdoor recreation as an important aspect of the rational use of the physical environment, consideration of which should constitute an integral part of courses dealing with the basic disciplines and their application.

In the past, professional education in outdoor recreation emphasized physical education activities and arts and crafts, with little attention being given to the integration of participation in recreation activities and managing recreational resources.

It has been recognized now, however, that there is clearly a need for professional skill in planning the allocation of resources to their best uses, in integrating outdoor recreation with other uses, in managing recreational resources efficiently, and in directing constructively the activities of those who use them. The change in emphasis has led at least four schools to use the name Department of Recreation and Park Administration.

The American Association for Health, Physical Education, and Recreation has made several studies on the content and structure of curricula needed to meet modern requirements in the outdoor recreation and education fields. The study emphasized a strong background of general education integrated with intensive study in more specific aspects of recreation education. A period of practical experience was also emphasized. The Association recognized two specialized program areas - recreation and parks administration, and camping and outdoor recreation. No attempt was made to prescribe specific courses. The specific courses should be adjusted to meet the needs of a specific geographic area, the institutions physical plant and the changing public trends in outdoor recreational activities.

In 1963, the Federation of National Professional Organizations for Recreation studied the curriculum content in outdoor recreation education. The curriculum proposal covered general education, professional education, and professional emphasis. It recommended that half of the total number of hours in the curriculum be devoted to general education for all students.

The following items were suggested as part of the professional education aspect of recreation education.

1. Knowledge of the philosophy and history of the recreation and park movements.
2. Understanding of community organization.
3. Knowledge of the development, structure, purpose, functions, and interrelationships of groups of agencies which render recreation and park services.
4. Understanding of the dynamics of leadership.
5. Understanding of the several fields of recreation, with special reference to programming and other means of attaining their objectives.
6. Understanding of administrative practices, including legal, financial, personnel, and public relations aspects.
7. Ability to relate theory to practice through a progression of laboratory and field experiences.
8. Ability to function as a student practitioner in a field agency. (2, p. 15)

The National Recreation and Park Association held a national forum on "Educating Tomorrow's Leaders in Parks, Recreation, and Conservation" in April, 1968. Numerous worthwhile recommendations resulted from the meeting. Several are worth mentioning here. A recommendation was made to strengthen existing field experience.

Increase the number and type of practical field experiences available to students. Insure that students receive proper guidance and supervision during their field experiences by selecting only agencies and settings where personnel are qualified by experience and education to supervise students. (6, p. 35)

Another specific recommendation dealt with developing of recreation education curricula. The necessity of being geared to our times was emphasized. It pointed out that too often colleges and universities are too slow to effectuate curricular changes, and, therefore, recommended that funds from public and private sources should be sought to finance experimental curricula. Sufficient funds should be provided over a long enough period to evaluate the effectiveness of these innovative curricula. (6, p. 37)

Today, a number of schools whose primary concern is the management of natural resources offer professional instruction in outdoor recreation either as separate curricula or in connection with other curricula.

In order to determine the magnitude of recreation studies currently available within two-year colleges, a survey of these institutions was undertaken. Barton's Guide to the Two-Year Colleges (4) and Patterson's American Education 1966-67, (3)

were helpful along with state educational departments and other individuals and organizations in determining which schools offer programs in some phase of recreation education. Each of these colleges, in turn, was contacted for information relative to their educational program in recreation. Thirty-one colleges responded. Generally, the programs presently being offered fall into three major groups: Recreation or Resource Recreation courses, Parks and Recreation courses, Park Administration courses.

A list of the institutions contacted can be found in the appendix in this volume of the report. Table 2 in Chapter I indicates the types of programs and numbers of institutions in each category that responded.

An analysis of the recreational studies picture in two-year colleges across the nation conveyed three major conclusions:

1. There has been a tremendous growth in two-year programs for educating associate professionals in recreation over the past several years.
2. The vast majority of these programs have been aimed at community or program-oriented recreation. The very few resource-oriented programs are, for the most part, maintenance-oriented.
3. There is little uniformity in structure and content of curricula ostensibly designed to produce persons of similar competencies in recreation.

The State University of New York Office of Two-Year Colleges was contacted to determine which courses are required in a regular two-year associate degree program. The Board of Regent's administrative policies for associate degree programs and more specifically the requirements set for the Associate in Applied Science degree follow. The Associate of Applied Science degree relates most closely to the proposed recreation-management program for Delhi Agricultural and Technical College.

ADMINISTRATIVE POLICIES FOR ASSOCIATE DEGREES

The Board of Regents in 1950 approved two degrees. Associate in Arts (A.A.) and Associate in Applied Science (A.A.S.) and in 1965 approved the additional degree Associate in Sciences (A.S.). These degrees may be awarded to graduates of registered two year (60 semester hours) or three year (90 semester hours) curricula provided institutions have charter authority to grant such degrees.

To have registered a curriculum leading to any of these degrees, an institution and the curriculum must satisfy (a) the requirements contained in Section 5 of the Regulations of the

Commissioner of Education, and (b) the specifications described in this policy sheet.

This statement of policy represents a revision of the 1953 Administrative Policies for the Associate Degrees. The revision is intended to reflect general changes in the thinking of the Department and to establish policy for the new Associate in Science degree. This policy statement seeks to establish general guidelines and to make clear-cut distinctions among the three degrees. All degree curricula, as distinct from non-degree programs, must contain a minimum of bona fide liberal arts and science courses which go beyond particular occupational or professional objectives. It is this segment of the curriculum that makes for a collegiate education. An institution should strive to exceed the stated minima in liberal arts courses and should attempt to achieve balance among the three major disciplines, the humanities, the natural sciences and mathematics, and the social sciences. In keeping with its mandated role, the State Education Department will exercise its discretion to insure that curricular patterns are consistent with the enlightened consensus of academic opinion. Specific distinctions among the three degrees are indicated below.

ASSOCIATE IN ARTS (A.A.)

The course of study leading to this degree should be an organized curriculum composed primarily of courses in the pure liberal arts and sciences. At a minimum, there should be 48 semester credit hours of work taken in the humanities, the natural sciences and mathematics, and the social sciences. The exact balance within the 48 semester hours among these three major fields is at the institution's discretion, but there should be a reasonable distribution of work in these three categories as well as depth in some.

ASSOCIATE IN SCIENCE (A.S.)

The course of study leading to this degree should be an organized curriculum composed of courses in the liberal arts and sciences. At least 30 semester hours of credit should be offered in the humanities, the natural sciences and mathematics, and the social sciences. The exact balance within the 30 semester hours among these three major fields is at the institution's discretion but there should be a reasonable distribution of work in these three categories as well as appropriate depth in one.

ASSOCIATE IN APPLIED SCIENCE (A.A.S.)

The course of study leading to this degree should be an organized curriculum with a minimum of 20 semester hours of credit drawn from the liberal arts and science areas com-

prising work distributed in the humanities, the natural sciences and mathematics, and the social sciences. In general, the 20 semester hours should be distributed with balance among the three major areas.

SUGGESTED USES FOR THE ASSOCIATE DEGREES

With the addition of the Associate in Science degree the junior and community colleges have, with appropriate charter authorization, flexibility to organize their curricula in the following patterns analogous to baccalaureate programs.

1. The Associate in Arts degree would be used primarily for transfer programs which lead to the bachelor of arts degree. It may also be used for general liberal arts programs of a non-transfer nature.

2. The Associate in Science degree may be used for certain occupationally oriented curricula, but is primarily designed to serve science or professionally related programs which lead to transfer to bachelor of science degree curricula.

3. The Associate in Applied Science degree, to be used primarily for occupationally oriented curricula, may at times be appropriate as a transfer degree to certain types of specialized baccalaureate programs such as the bachelor of business administration, bachelor of education, or bachelor of engineering. (6)(5)

The Appalachia Recreation and Cultural Resources Study Phase Two (7)

supports the principles of the present recreation-education development complex for the Delhi Valley Campus. It states that an important aspect of this program is the creation of a two-year curriculum to train students for careers in recreation management. Thus, training of these people is accomplished within the Appalachian Region where such knowledge is particularly needed. The multiple benefits that may accrue from such a program include the availability of recreation and cultural facilities to the public at the training site, students would have an outdoor laboratory for learning through operating such a facility, and it would be possible to view first hand the factors which are contributing to the effective functioning of a recreation enterprise in the Project Area.

The report further states that the elementary and secondary education programs include projects to develop school nature centers and trails, the planning and development of nature areas apart from school properties, the conducting of teacher training workshops, the operation of programs in cooperation with school systems to take students into the field to present contemporary approaches for

conservation education, and lastly to develop innovative curriculum modifications and new teaching techniques to stimulate students.

Clearly the Delhi project lends itself in every respect to this kind of cooperative opportunity.

In the context of conservation-education the impact on both adults and children of teaching in this field is emphasized. A primary and secondary education school should include courses on conservation in their curriculum. This could be achieved on site at Delhi by class teachers on field trips and through the use of specialists trained at an institution such as Delhi College.

Every effort should be made to establish a cooperative exchange of ideas and programs between the existing Roger's Conservation-Education Center located at Sherburne, N.Y. and the proposed Valley Campus Project at Delhi. Some aspects of the Roger's Center facility could be directly incorporated into the Valley Campus program. A brief description of the Roger's Center follows.

The conservation center has a professional staff of director and an assistant. There are two clerical staffs (one permanent), four grounds maintenance staffs (one permanent), three temporary plus a temporary summer staff with several youth corps people, two high school seniors, one college senior and one school teacher. Approximately 75-80,000 people use the facilities a year. This should be qualified by noting that use is generally for short periods, say an hour or two, with only a few persons participating from a half-day to several days.

A federal program, RACE, funds some of the activities at the center including the rehabilitation of a building shortly to be opened for dormitory use. There are approximately 400 plus acres of land, 60% of which is developed. Pioneer camping is provided for youth and scout groups who either use the center directly or join in the programs provided. The facilities provided include nature trails, marsh observation area, classrooms, displays and interpretive personnel.

The program is designed primarily to meet the needs of school systems on a field trip and class basis. There are other organizations that take part in programs or use the facilities available, for example, the Future Farmers of America, the 4-H and Boy and Girl Scouts, civic organizations such as garden clubs, sports clubs and ornithology clubs, and adult education courses in conjunction with the schools.

Summary

The following sixteen points have been abstracted from the study as a summation of those items that should be considered pertinent to the content and operation of a recreation-management curriculum. The list by no means should be considered absolute. Its purpose is to provide a general basis upon which particular curricula might be established. An extensive bibliography of other significant references and texts may be found in the References Appendix section to the Curriculum-Volume 3 of this report.

1. There is a growing need in this country for both more recreational facilities and trained personnel to manage these facilities.
2. Various individuals and organizations have become aware of this crisis and have initiated action, in the form of studies, reports and seminars, to determine the specific problems and to make recommendations as to how to alleviate these problems.
3. The most critical areas that need attention are found in or adjacent to the rapidly expanding urban "Megalopolises".
4. There is a need to educate ourselves and future generations to deal comprehensively with both human resources and natural resources and their relation to each other-in other words, the "total environment".
5. It is especially important that outdoor recreation education be offered to children from their earliest years as a means of helping them to understand, enjoy, respect and to protect the world in which they live, both now and later.
6. It is the responsibility of colleges and universities to provide education relating to the natural environment and to train persons who will serve as leaders of those engaged in recreational activities.
7. These trained recreation personnel need to be trained to handle human relations problems as well as technical problems.
8. A period of practical working experience is very beneficial as a part of training. It gives the student the opportunity to relate theory to practice.
9. Recreation-education curricula should be geared to the times and be flexible enough to meet the specific needs of the individuals, the institution, the geographic area and the changing needs of the public.

10. The following items are of particular significance relative to a recreation-education curriculum: philosophy, and history of recreation and park movements; community organization; development, structure, purpose, functions, and interrelationships of groups of agencies which render recreation and park services; dynamics of leadership; recreation programming; administrative practices, including legal, financial, personnel, and public relations aspects, relating theory to practice through a progression of laboratory and field experiences.
11. Establishment of a number of experimental recreation curricula and an appropriate evaluation system is recommended to keep teaching material with the times and to accelerate the process of effectuating curricular changes.
12. There has been a tremendous growth in two-year programs for educating associate professionals in recreation over the past several years.
13. The vast majority of these programs have been aimed at community or program-oriented recreation. The very few resources-oriented programs are, for the most part, maintenance-oriented.
14. There is little uniformity in structure and content of curricula ostensibly designed to produce persons of similar competencies in recreation.
15. The Appalachian Recreation and Cultural Resources Study 1967-1969 supports the principles of the present recreation-education development complex for the Delhi Valley Campus.
16. A substantial investment, such as that to develop a recreation facility complex, warrants year-around practical experience laboratory training. The trainees need the kind of contact that will occur during the peak tourist season as well as that which occurs in the off-season periods.

V. INTERRELATIONSHIPS OF SIGNIFICANT FACTORS

Introduction

Events do not occur in isolation. They are caused by prior events or decisions and in turn have consequences and effects, both direct and indirect, upon subsequent events and decisions. Certain cause-and-effect relationships can be closely predicted, others merely conjectured and yet others cannot even be anticipated with any degree of certainty.

In the combined recreation-education complex contemplated for Delhi, and possibly for other Appalachian locations, there are two types of functional relationships. In the first place, there are the internal ones between the various areas and activities within the Valley Campus Complex and the College. These include: academic activities, vocational training, agricultural management, recreation training, etc. Certain courses and activities will be common to several of these general areas. Many activities will overlap but should be planned so as to avoid unnecessary duplication. This aspect of the project is covered in detail in the Curriculum Volume of the Report.

In the second place, there are external relationships to be considered, that is those events and decisions having consequences outside the domestic confines of the College. For example, any increase in or addition to a recreation facility will increase the attractiveness of the area for the resident and tourist alike, and increase participation in various activities. An increase in tourism will result in an increase of resident population in supporting trades and services (gas station, gift shop, accommodations, etc). Such increases will be conditioned by, but will also help to shape, the type of tourist trade which develops, whether day use, week-end use or vacation use. Opportunities for practical experience for students enrolled in recreation management and hotel management courses will be increased. The increase in resident population to serve the new or improved "basic industry" (in this example, tourism) will induce a "second round" of increases in construction, retail trades, insurance businesses and so on throughout the industry categories.

Another way to approach the question of interrelationships is to ask what chain of events (process) could be expected to lead to the successful conclusion of a certain operation. Will the installation of a certain

facility in fact have the desired effect or must a combination of activities be established to produce the desired effect? And is the "desired effect" really the imposition or projection of will by a particular interest group, or is it genuinely in the public interest? And how is "public interest" defined? Is the proposed project what enough people want, can afford, have access to and will in fact use?

For example, even if only a modest ski facility is possible because of the limitations of natural features, it will be essential to ensure, among other things, ready access to it, that adequate parking is provided, that people will in fact come to use it. It may be necessary to provide additional attractions or opportunities for participants of the main activity not only for their use when they arrive, but to attract sufficient numbers in the first place. Such secondary activities could include: bar, lounge, restaurant, entertainment, dancing, novelty shop, pro shop, tobogganing slope, even nursery care.

To provide all this, one or several entrepreneurs must be attracted to invest, they must be able to get credit, they must not be unreasonably restricted by zoning, building, health, licensing or other rules and regulations. Such legal codes (local or otherwise) must be written, interpreted and applied in such a way as to encourage, not discourage, the active and continuing participation of the entrepreneur. One successful developer will increase the chances for others to be attracted to the area as general economic vitality gathers momentum. Construction and operation may be separate enterprises, both involving local and imported skills and providing direct economic improvement. Success also depends on selection of the right site and the appropriate facility type and size, and upon quality excellence in both design and execution of the project.

Development Factors

To assist in developing the prototype and the Delhi Valley Campus master plan, a list of factors (variables) was drawn up under four main headings. While the list is comprehensive, it is not necessarily exhaustive of all possible considerations. Indeed, it has rather been deliberately simplified for the purposes of clarity and because the development of a more sophisticated model was outside the scope of this study.

Natural Factors

Slope -----	level: steep
Elevation -----	low: high
Soil	
fertility -----	infertile: fertile
bearing capacity ----	low: high
Vegetation -----	barren: forest
Climate	
wind -----	sheltered: windy
temperature range ---	low: high
rainfall -----	low: high
snow cover -----	low: high
sun -----	exposed: sheltered
Water -----	stream: lake
Scenic quality -----	low: high
Seasonal variations	
Local variations	

Socio-economic Factors

Financing -----	sources (private or public), amounts, timing
Costs -----	capital, operating
Benefits -----	local business stability, expansion
-	local recreation opportunities
-	tax base improvement
-	employment increases
-	income increases
Market -----	competition
Community participation --	involvement of local voluntary groups-
	support or opposition

Political and Administrative Factors

Federal Agencies -----	policy, financing
State Agencies -----	policy, financing, services
Local Agencies -----	Jurisdiction (county, town, village)
-	Special districts (schools, utilities, etc.)
Power structure -----	government system
-	economic system
-	educational system
-	voluntary system
Initiative -----	local leadership (formal or informal)
Motivation -----	private interest, public land
Cooperation -----	individuals, groups, organizations
Taxation -----	collection, distribution
Internal organization ----	construction program
-	staffing, supplies
-	curriculum integration
External organization ----	local institutions, organizations
-	tourist market
Property ownership -----	effective control (public or private)
-	easements, rights-of-way

Design and Planning Factors

Program requirements	-----	client's brief
Natural features	-----	topography, landscape character, views
Exogenous factors	-----	ownerships, utilities, nuisances
Site selection	-----	location
Land use	-----	general: particular, single: multiple
Densities	-----	land use intensity
Access	-----	highways, rail, water
Circulation	-----	pedestrian (walks, trails, etc)
	-	vehicular (local streets, parking, servicing)
Structures	-----	location, mass, orientation
Staging	-----	priorities, future expansion
Aesthetics	-----	architecture, landscape architecture

Application of Development Factors

As an example the preceding approach is applied to a ski facility development. The design of a facility depends on many factors being present within certain limits of tolerance.

Natural Factors - Ski Facility

Slope	-----	must be within certain per cent ranges according to degree of proficiency of skiers (novice, intermediate, and expert)
	-	must flatten sufficiently at the base for safe stopping and to accommodate crowds, ski lodge, parking, etc.
Elevation	-----	must have minimum of 500 vertical difference in elevation for given length of slope
Soil	-----	presence of boulders or rock outcrops will increase construction cost
	-	erosion characteristic for certain soils must be considered
	-	bearing capacity must be adequate for lodge construction and tows
Vegetation	-----	must be sufficiently open for ski-runs, tows, trails, etc. or be cleared accordingly
	-	variety of vegetation creates interest and a more pleasant environment
Climate	-----	preferably sheltered from winter wind
	-	temperature should be below freezing for continuous periods
	-	snowfall and cover must be adequate or augmented by snow-making equipment
	-	slope preferably should be sheltered from direct afternoon sun
	-	water may be necessary for snow-making equipment

Scenic quality ----- high scenic quality desirable but not essential

The most important factors are: degree of slope, length of slope, vertical difference in elevation, amount of continuous snow cover, and slope orientation to sun and wind. Some of the less important factors include: vegetative cover, availability of water, soil bearing capacity, and quality of scenery.

Socio-Economic Factors - Ski Facility

Financial -----	Private enterprise must be persuaded/motivated/encouraged/permitted to finance, develop & operate various parts of facility.
	- developers and operators must have access to necessary funding and credit.
Costs -----	capital investment must be phased in relation to available funds, and to coincide with market expansion.
	- operating costs, admission charges, parking fees, tow fees, etc. must relate to what market will bear, also prices in any food, drink, or novelty concession or pro shop.
Benefits -----	secondary services must be actively encouraged as required (concessions, entertainment, etc.)
	- facilities may accommodate ancillary activities, sightseeing, private receptions, etc.
	- indirect benefits extend far beyond immediate locality.
Community Participation --	installation must be sympathetic to local feeling (prejudice) re: "views", "spoiling the landscape", etc., criticisms must be met/anticipated and overcome.
	- extent of benefits largely dependent upon active local approval, support, and participation.

Political and Administrative Factors - Ski Facility

Local Agencies -----	conflicts with local codes & regulations must be resolved.
	- rights of use within utility easements must be established/clarified.
Taxation -----	taxation policies - except that higher personal income tax may mean fewer families able to indulge in such luxuries as skiing.

It should be pointed out that the general public, local and regional, must be encouraged to use the facility through general advertising and special

events, winter carnivals, etc. Access rights must be also assured/protected onto property in private ownership adjacent to facility as necessary.

Some factors that are not as relevant would include: federal policies and financing; state policies and financing (except that in outdoor recreation generally it is of concern to certain government agencies that ski facilities be encouraged to develop where they will likely have greatest benefits to locality and region).

Design and Planning Factors - Ski Facility

Access -----	all weather highway access and parking (ploughed out in winter) to be maintained.
Circulation -----	to accommodate cars, coaches, service vehicles.
Structures -----	size of facility depends on expected usage - arrangements depend on circulation of crowds on skis - include provision of storage, locker rooms, showers, etc. if desired.
Land Use -----	consider summer use, meetings, receptions, sight seeing (use of lifts), picnicking, hiking(trails), etc.
Aesthetics -----	location of slope(s), tow(s), and lodge to take advantage of views for skiers and not spoil views from elsewhere, integrate with landscape. - design quality-attention to detail especially design, quality, location of concessions by entrepreneurs. Consider wires, signs and directions, graphics, lighting for night use.

For each component or facility contemplated, a similar series of lists is prepared first to test in any given situation for feasibility, second to assist in planning and developing that facility.

Regarding feasibility for example, it may be discovered that only one factor prevents the realization of a given project. Once this factor is isolated, it can more easily be dealt with so that a rational and informed decision can be made. The decision can vary, of course, from one where
a) the limiting factor is removed or overcome and the project proceeds as planned, b) modifications are made, c) a delay in time is agreed, d) some other element is given priority, e) a decision is made to abandon that particular facility.

In planning and operating a facility, this simple but comprehensive procedure provides means of anticipating problems and correcting for them in the solutions sought. This process is developed more fully and specifically and with graphic detail in the Prototype Volume of this report. It has also been the basis for the development of the design in the Master Plan Volume.

Having considered each relevant factor under each major heading, now these are considered and correlated with each other. By this means as many aspects of a problem as possible are considered individually then inter-dependently.

APPENDIX I

INDIVIDUALS AND ORGANIZATIONS CONTACTED TO DETERMINE THE EXISTENCE OF AN
OPERATING RECREATION-EDUCATION COMPLEX AS A TRAINING LABORATORY FOR
RECREATION MANAGERS

I-A. Contacts: Recreational

1. No Replies Received
2. We do not know of any planned or existing facilities and we know of no other sources of information
3. We do not know of any planned or existing facilities but we suggest other sources of information
4. A similar project or facility is believed to exist at a certain location
5. We are planning or are operating a similar facility at this time

I-B. Contacts: Educational

1. 4-year higher education institutions
2. 2-year higher education institutions
3. Institutions operating a hotel and/or restaurant facility as a training laboratory
4. Other

I-C. Contacts: Other

APPENDIX I

I-A-1. CONTACTS: RECREATIONAL
NO REPLIES RECEIVED¹

Peter J. Verhoven
National Recreation and Park Association, 1700 Pennsylvania Ave., N.W.,
Washington, D.C. 20006

Assistant Regional Forester for Information and Education
U.S. Forest Service, 633 W. Wisconsin Ave., Milwaukee, Wisconsin 53200

Jack C. Culbreath, Regional Information Officer
U.S. Forest Service, Box 1628, Juneau, Alaska 99801

John M. Herbert, Assistant Regional Forester
Recreation and Land, U.S. Forest Service, 324 25th Street, Ogden, Utah 84401

Stanley M. Jepson
Information and Education, U.S. Forest Service, U.S. Department of Agriculture,
12th and Independence Ave., S.W., Washington, D.C. 20250

George E. Lafferty, Assistant Regional Forester
Information and Education, U.S. Forest Service, Denver Federal Center,
Denver, Colorado 80225

Grant A. Morse, Assistant Regional Forester
Information and Education, U.S. Forest Service, 630 Sansome Street,
San Francisco, California 94111

¹ No reply was received from the National Recreation and Park Association.
Replies were received from another representative of each of the six
Forest Service Regions listed in the "No Replies Received" section.

I-A-2. CONTACTS: RECREATIONAL
WE DO NOT KNOW OF ANY PLANNED OR EXISTING FACILITIES
AND WE KNOW OF NO OTHER SOURCES OF INFORMATION
(see Table 1 in Chapter I)

Philip L. Heaton, Assistant Regional Forester
Recreation, U.S. Forest Service, P.O. Box 3623, Portland, Oregon 97208

S. Blair Hutchison, Assistant Director
Recreation Research, U.S.D.A. - Forest Service, 507 25th Street, Ogden,
Utah 84401

George F. Roskie, Assistant Regional Forester
Division of Recreation, Lands, Wildlife and Watershed Management, U.S.
Forest Service Federal Building, Box 1628, Juneau, Alaska 99801

Alexander E. Smith, Assistant Regional Forester
Division of Information and Education, U.S. Forest Service, 324 25th Street,
Ogden, Utah 84401

Zane C. Smith, Assistant Regional Forester
Division of Recreation and Lands, U.S. Forest Service, 517 Gold Ave., S.W.,
Albuquerque, New Mexico 87101

J. Morgan Smith, Assistant Regional Forester
Division of Information and Education, U.S. Forest Service, 324 25th Street,
Ogden, Utah 84401

Jack H. Wood, Assistant Regional Forester
Information and Education, U.S. Forest Service, P.O. Box 3623, Portland,
Oregon 97208

I-A-3. CONTACTS: RECREATIONAL
TABLE 1-2. WE DO NOT KNOW OF ANY PLANNED OR EXISTING FACILITIES,
BUT WE SUGGEST OTHER SOURCES OF INFORMATION
(see Table 1 in Chapter I)

Edward F. Barry, Chief
Division of Recreation and Land, U.S. Forest Service, Federal Building,
Missoula, Montana

Harry W. Camp, Assistant Director
Recreation Research, U.S.D.A. - Forest Service, P.O. Box 245, Berkely,
California 94701

Wilfred S. Davis, Chief
Division of Recreation, U.S. Forest Service, 630 Sansome Street,
San Francisco, California 94111

Robert W. Harris, Assistant Director
Recreation Research, U.S.D.A. - Forest Service, P.O. Box 3141, Portland,
Oregon 97208

Henry A. Harrison, Assistant Regional Forester
Recreation and Lands, U.S. Forest Service, Denver Federal Center, Denver,
Colorado 80225

Junior B. Hilmen, Assistant Director
Recreation Research, U.S.D.A. - Forest Service, P.O. Box 2570,
Asheville, North Carolina 28802

Vaughn H. Hofeldt, Assistant Regional Forester
Division of Recreation and Watershed Management, U.S. Forest Service,
50 Seventh Street, N.E., Atlanta, Georgia 30323

Kenneth A. Keeney, Chief
Division of Information and Education, U.S. Forest Service, Federal Building,
Missoula, Montana

James T. Morgan, Assistant Director
Forest Recreation Research, U.S.D.A. - Forest Service, Folwell Avenue,
St. Paul, Minnesota 55101

Lawrence P. Neff, Assistant Director of Recreation
U.S.D.A. - Forest Service, 12th and Independence Ave., S.W.,
Washington, D.C. 20250

Kenneth L. Quigley, Assistant Director
Recreation Research, U.S.D.A. - Forest Service, 6816 Market Street,
Upper Darby, Pennsylvania 19082

George K. Stephenson, Assistant Director
Recreation Research, U.S.D.A. - Forest Service, 701 Loyola Avenue,
New Orleans, Louisiana 70113

Edward H. Stone II
Forest Service-Recreation, U.S. Department of Agriculture,
12th and Independence Ave., S.W., Washington, D.C. 20250

Harold A. Svensen, Chief
Recreation, Range and Wildlife Management, U.S. Forest Service,
633 W. Wisconsin Ave., Milwaukee, Wisconsin 53203

John W. Wilkes
Georgia Department of State Parks, 7 Hunter Street, S.W., Atlanta, Georgia 30334

I-A-4. CONTACTS: RECREATIONAL
TABLE 1-3. A SIMILAR PROJECT OR FACILITY IS BELIEVED TO EXIST
AT A CERTAIN LOCATION
(see Table 1 in Chapter I)

William W. Huber, Chief
Division of Information and Education, U.S. Forest Service,
50 Seventh Street, N.E., Atlanta, Georgia 30323

Dr. Ross Netherton, Chief
Division of Research and Education, Bureau of Outdoor Recreation,
Washington, D.C. 20240

I-A-5. CONTACTS: RECREATIONAL

TABLE 1-4. WE ARE PLANNING OR ARE OPERATING A SIMILAR FACILITY AT THIS TIME
(see Table 1 in Chapter I)

Dr. H.B. Masters, Director
Unicoi Experiment Station for Outdoor Recreation, P.O. Box 398, Helen,
Georgia 30545

Clyde A. Maxey, Assistant Chief
Branch Training, U.S. Department of the Interior, National Park Service,
Washington, D.C. 20240

Paul Petzoldt, Director
National Outdoor Leadership School, Lander, Wyoming 82520

I-B-1. CONTACTS: EDUCATIONAL
4-YEAR HIGHER EDUCATION INSTITUTIONS¹

Auburn University
Auburn, Alabama 36830

Boston University
Boston, Massachusetts 02215

Chico State College
Chico, California 95927

Colorado State University
Fort Collins, Colorado 80521

Cornell University
Ithaca, New York 14850

University of Florida
Gainesville, Florida 32601

Georgia State College
Atlanta, Georgia 30300

University of Georgia
Athens, Georgia 30602

Idaho State College
Pocatello, Idaho 83201

North Illinois University
DeKalb, Illinois 60115

South Illinois University
Carbondale, Illinois 62903

University of Illinois
Urbana, Illinois 61801

Indiana University
Bloomington, Indiana 47405

Louisiana State College
Baton Rouge, Louisiana 70803

University of Massachusetts
Amherst, Massachusetts 01002

Michigan State College
East Lansing, Michigan 48824

University of Michigan
Ann Arbor, Michigan 48104

University of Minnesota
Duluth, Minnesota 55812

Montana State University
Missoula, Montana 59801

Morehead State College
Morehead, Kentucky 40351

University of New Hampshire
Durham, New Hampshire 03824

New York University (Washington Square)
New York, New York 10003

North Carolina State University
Raleigh, North Carolina 27607

Sacramento State College
Sacramento, California 95819

S.F. Austin State College
Sherman, Texas 75090

Texas A & M University
College Station, Texas 77843

Utah State College
Logan, Utah 84321

Virginia Polytechnic Institute
Blacksburg, Virginia 24061

University of Washington
Seattle, Washington 95819

University of Wisconsin
Green Bay, Wisconsin 54301

Yale University
New Haven, Connecticut 06511

¹ All contacts listed in Appendix I-B were also used as references for "Chapter III-The Curriculum Content and Operation."

I-B-2. CONTACTS: EDUCATIONAL
2-YEAR HIGHER EDUCATION INSTITUTIONS

Amundsen - Mayfair Branch Chicago City Junior College Chicago, Illinois 60630	Lamar Jr. College Lamar, Colorado 81052
Antelope Valley College Lancaster, California 93534	Laney College Oakland, California 94548
Catonsville Community College Baltimore, Maryland 21228	Los Angeles City College Los Angeles, California 90029
Centralia Community College Centralia, Washington 98531	Los Angeles Valley College Van Nuys, California 94601
City College of San Francisco San Francisco, California 94112	Manhattan Community College New York City, New York 10020
Colorado Mountain College Glenwood Springs, Colorado 81601	Merritt College Oakland, California 94609
Community College of the Finger Lakes Canandaigua, New York 14424	Miami Dade Jr. College Miami, Florida 33167
Dallas Baptist College Dallas, Texas 75211	Mira Costa College Oceanside, California 90254
Dean Junior College Franklin, Massachusetts 02038	Monroe Community College Rochester, New York 14607
East Carolina University Greenville, North Carolina 27834	Monterey Peninsula College Monterey, California 93940
Erie Co. Technical Institute Buffalo, New York 14221	Mount St. Clare College Clinton, Iowa 52732
Foothill College Los Altos, California 94022	Mt. San Antonio College Walnut, California 91789
Glendale College Glendale, California 91208	Mr. San Jacinto College Gilman Hot Springs, California 92340
Golden West College Huntington Beach, California 92647	Northwestern Connecticut Community College Winsted, Connecticut 06098
Hudson Valley Community College Troy, New York 12180	Northwestern Michigan College Traverse City, Michigan 49684
Lake City Jr. College & Forest Ranger School Highway 90, Lake City, Florida 32055	Orange County Community College Middletown, New York 10940

Palomar Jr. College
San Marcos, California 92069

Piney Woods Jr. College
Piney Woods, Mississippi 39148

Prescott College
Prescott, Arizona 86301

Ranger Jr. College
Ranger, Texas 76470

Reedley College
Reedley, California 93654

Rio Hondo College
Whittier, California 90607

Sierra College
Rochlin, California 95677

Southeast Branch
Chicago City Jr. College
Chicago, Illinois 60617

Southwestern Christian College
Terrell, Texas 75160

Southwestern College
Chula Vista, California 92010

SUNY Agricultural and Technical College
Alfred, New York 14802

Treasure Valley Community College
Ontario, Oregon 97914

Vincennes University
Vincennes, Indiana 47591

Wilson Junior College
Chicago, Illinois 60621

I-B-3. CONTACTS: EDUCATIONAL
INSTITUTIONS OPERATING A HOTEL AND/OR RESTAURANT FACILITY
AS A TRAINING LABORATORY

City College of San Francisco
San Francisco, California 94112

Cornell University
Ithaca, New York 14850

Erie County Technical Institute
Buffalo, New York 14221

Michigan State University
East Lansing, Michigan 48823

Nevada Southern University
Las Vegas, Nevada 89109

New York City Community College
Brooklyn, New York 11201

Oklahoma State University
Stillwater, Oklahoma 74074

Paul Smith's College
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APPENDIX II

OUTDOOR RECREATION TRENDS IN MAJOR SUMMERTIME ACTIVITIES¹

- II-A. Most Popular Summertime Outdoor Recreation Activities, 1965, in Order of Popularity
- II-B. Major Summertime Activities, in Order of Popularity, Which Have Grown Fastest Since 1960
- II-C. Major Summertime Activities, in Order of Popularity, Which Will Grow the Fastest Between 1968 and 1980
- II-D. Major Summertime Activities, in Order of Popularity, Which Will Grow the Fastest Between 1968 and 2000

¹ Source: U.S. Department of the Interior, Bureau of Outdoor Recreation, Outdoor Recreation Trends. Washington: GPO, 1967.

APPENDIX II

II-A. MOST POPULAR SUMMERTIME OUTDOOR RECREATION ACTIVITIES, 1965, IN ORDER OF POPULARITY

1. Walking for pleasure
2. Swimming
3. Driving for pleasure
4. Playing outdoor games and sports
5. Bicycling
6. Sightseeing
7. Picnicking
8. Fishing
9. Attending outdoor sports events
10. Boating (other than canoeing or sailing)
11. Nature walks
12. Camping
13. Horseback riding
14. Water skiing
15. Hiking
16. Attending outdoor concerts and plays

II-B. MAJOR SUMMERTIME ACTIVITIES, IN ORDER OF POPULARITY, WHICH HAVE GROWN FASTEST SINCE 1960

1. Bicycling
2. Playing outdoor games or sports
3. Walking for pleasure
4. Attending outdoor concerts and plays
5. Camping
6. Picnicking
7. Sightseeing
8. Hiking

II-C. MAJOR SUMMERTIME ACTIVITIES, IN ORDER OF POPULARITY, WHICH WILL GROW THE FASTEST BETWEEN 1968 AND 1980

1. Waterskiing
2. Camping
3. Hiking
4. Swimming
5. Playing outdoor games and sports
6. Attending outdoor concerts and plays
7. Walking for pleasure
8. Attending outdoor sports events

II-D. MAJOR SUMMERTIME ACTIVITIES, IN ORDER OF POPULARITY, WHICH WILL
GROW THE FASTEST BETWEEN 1968 AND 2000

1. Waterskiing
2. Camping
3. Hiking
4. Playing outdoor games and sports
5. Boating (other than canoeing or sailing)
6. Swimming
7. Attending outdoor concerts and plays
8. Sightseeing

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¹ Other references and a complete list of institutions contacted can be found in Appendix I-B of this volume.